

Cleaning, Sanitizing, and Disinfecting for Child Cares

A Guide for Early Care and Education Providers

APPLETREE Supplemental Grant

Office of Environmental Health and Safety

Washington State Department of Health

DOH 333-310 January 2023

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

Table of Contents

Introduction	3
Cleaning	4
What to Know	4
What to Do - Handwashing	4
How to Do It - Handwashing	4
What to Do - Surfaces	5
How to Do It - Surfaces	5
Sanitizing	6
What to Know	6
What to Do - Sanitizing	6
How to Do It	7
Disinfecting	8
What to Know	8
What to Do – Disinfecting	8
How to Do It	9
Choosing Safer Products	10
Choose Safer Ingredients	10
Read the Label	11
Look for the EPA Registration Number	12
Check the EPA List	12
Using Chemicals Safely and Correctly	12
Use Safe Practices to Protect Your Health	13
Contact Time	13
Concentration	14
Ventilate	14
Do Not Spray Chemicals in the Air	15
Do Not Mix Chemicals	15
Store and Dispose of Chemicals Safely	15
Bleach	15
Resources	17

Introduction

Welcome child care and early learning providers!

Thank you for your work.

The Washington State Department of Health is here to help you stop the spread of germs using safe and healthy practices. Cleaning, sanitizing, and disinfecting keep germs from spreading at your child care. This packet helps you know which you should do, and which chemicals are safer. Knowing this will help you make a safer and healthier cleaning plan that also saves time and money.

This document will help you:

- Reduce the spread of germs.
- Keep your indoor areas healthy.
- Keep staff and children safe from harmful chemicals.
- Clean and disinfect safely in the era of COVID-19 and beyond.

This document will guide you through safe and effective cleaning, sanitizing, and disinfecting. Each part describes what to know, what to do, and how to do it.

Many people get sick or hurt from using strong chemicals like sanitizers and disinfectants too often when they are not needed, or from not using them safely. Table 1 below is a quick overview of cleaning, sanitizing, and disinfecting. Sometimes cleaning is all that is needed.

There are areas where you will need to clean, sanitize, and disinfect regularly. For those areas, it is important to have a schedule.

Using the right chemicals—and the right *amount* of chemicals—for the job also saves you money! Many people waste money by using too much product. Using safer products also protects your employees' health, reducing their risk of getting sick or hurt from using harmful chemicals. Safer and healthier employees can also mean fewer sick days and a more productive team.

While cleaning and disinfecting are important for slowing the spread of infections, they do not replace other steps, like wearing face coverings and staying home when sick. Continue to follow all DCYF rules and licensing regulations. If someone at your child care is sick or may be sick with COVID-19 or any other <u>notifiable condition</u>, you must report the case(s) to your local health jurisdiction. They will give you guidance on how to prevent the illness from spreading.

Table 1: Definitions for Cleaning, Sanitizing, and Disinfecting

Activity	What it does
Cleaning	Removes dirt, grime, oils, and most germs
Sanitizing	Lowers the number of germs to a safe level that keeps people from getting sick
Disinfecting	Kills germs

For more information, see <u>NRC's Caring for Our Children Appendix J: Selection and Use of a Cleaning,</u> Sanitizing, or Disinfecting Product (PDF).

Cleaning

What to Know

There are many types of germs passed between people. Germs travel on our hands, mouth, nose, and breath. Germs build up on our hands and things we touch. Cleaning often with soap and water removes germs before they build up and keeps us healthy.

There are specific places and times when you also need to sanitize or disinfect after cleaning. You will learn more about those places in the <u>Sanitizing</u> and <u>Disinfecting</u> sections. But for all places, cleaning with soap and water is the first thing to do to keep everyone safe and healthy.

What to Do - Handwashing

Germs travel on hands! Always wash your hands:

- Before and after eating, serving, preparing or touching food or preparing bottles.
- After coughing, sneezing, or blowing your nose.
- After using the toilet, changing diapers, or helping children use the toilet.
- After visiting or caring for a sick child or family member.
- After touching or feeding animals or pets.
- When you arrive at the child care and after coming in from outdoors or gardening.
- After taking out the garbage.
- After coming in contact with body fluids.
- Throughout the day, especially before touching your face.

When everyone washes their hands, there are less germs to spread, and fewer people get sick. Since germs travel on our hands, touching your face (eyes, nose, and mouth) with unwashed hands can bring germs into your body and make you sick. Washing hands often prevents people from getting sick this way.

You can also avoid bringing germs into your body by not touching your face at all. But children touch everything and may not be able to avoid touching their faces. That means it is especially important for children to wash their hands often.

How to Do It - Handwashing

Six Easy Steps to Clean Hands

Hand hygiene, or keeping our hands clean, is important. Sometimes we wash our hands too quickly, which leaves germs behind. Take time to do the job right. Here's how:

- 1. Wet your hands with running water.
- 2. **Rub** your hands together with soap. Look for the suds foaming.
- 3. **Scrub** for at least 20 seconds, washing the top of your hands, between your fingers, and under your fingernails.
- 4. **Rinse** your hands with water until all the soap is gone.

- 5. **Dry** your hands with a clean towel or let them air dry.
- 6. **Turn off** the water with a paper towel.

Provide plain fragrance-free and dye-free liquid foaming soap for handwashing. Fragrances irritate about a third of people. Don't use "antimicrobial" soaps. They generally don't work well and aren't good for human health or the environment.

No soap and water? Use Hand Sanitizer

Sometimes soap and water are not around. While you are on the go, you can use an alcohol-based hand sanitizer to clean your hands. This option is only for staff or children over 24 months old who have written parental permission on file. Use enough to wet the hands and rub for 20 seconds before it dries. Only use fragrance-free hand sanitizers with at least 60 percent alcohol.

Make sure to follow the $\underline{\text{WAC }110\text{-}300\text{-}0200}$ for handwashing and using hand sanitizer at your child care program.

What to Do - Surfaces

Clean All Surfaces, Especially Those That People Touch Often

Scrub surfaces with soap and water to remove grime, dirt, oils, and germs. Clean all surfaces, paying special attention to surfaces that get used or touched more often and by more people. Those are surfaces where germs are found. If kids are touching it, you should clean it often.

In general, you need to clean everywhere, including areas and objects that you will also sanitize or disinfect. Germs are more likely to build up on surfaces that people touch often (Table 2), so clean those surfaces throughout the day. Cleaning stops the germs from building up and making people sick

Table 2: Surfaces that people touch often.

- Doorknobs
- Faucet handles
- Light switches
- Refrigerator and microwave doors
- Stove door handles and controls
- Cabinet handles
- Stair railings

- Tables
- Windows/windowsills
- Toys
- Crib rails
- Tops of child-sized chairs
- Wall phones
- Shared clipboards and pens

How to Do It - Surfaces

Easy and effective cleaning takes only a few steps.

What You Need To Clean Surfaces

- Plain Soap
- Water
- A cloth (a microfiber cloth, if possible)

Microfiber cloths can pick up the smallest bits of dirt, grime, and germs. This makes them the best to remove germs when cleaning. After using microfiber cloths to clean, wash them with other laundry in hot water and air or tumble dry them.

If you don't have a microfiber cloth, you can also use any lint-free cloth.

How To Clean Surfaces

- 1. Scrub the surface with soap, water, and a microfiber cloth to loosen and remove grime, dirt, oils, and germs.
- 2. After cleaning, rinse the soap away with fresh water.

You can get the kids involved, too! It is safe for kids to use soap and water to clean their hands, tabletops, and toys if only lightly soiled. When the kids help clean, they learn healthy habits and you save time.

Use Plain Soap

Plain soap and water are all you need to remove germs. When choosing your soap:

- Look for a seal that shows third party certification. Products with a Green Seal and the EPA's Safer Choices label are healthier choices.
- Choose fragrance-free options. Scented chemicals can trigger asthma and hurt your lungs.
- Avoid products that say "anti-bacterial" or "anti-microbial" on the label. These products have added chemicals that do not help clean and are not healthy.





EPA Safer Choice label

Sanitizing

What to Know

In certain places, some germs stick around after cleaning. Sanitizing reduces the number of germs to a level where people will not get sick. Sanitizing is important because it keeps people from getting sick from germs on surfaces without making people sick from using too many dangerous chemicals.

What to Do - Sanitizing

There are some places you need to sanitize after cleaning. Table 3 lists areas and items to sanitize. See NRC's Caring for Our Children, Appendix K (PDF) to learn more about what you should sanitize to protect people from getting sick.

Table 3: What to Sanitize

- Areas where food is made or served:
 - Kitchen counters, tables, chairs, highchairs, trays, bottles, dishes, eating and preparation utensils, and any other items or surfaces that touch food
- Areas that lots of children touch, especially after putting their hands into their mouth:
 - o Toys, including those that younger children put into their mouth
 - o Pacifiers and bottles
- Drinking fountains
- Electronics like phones and keyboards
- Hard floors
- Cribs, cots, mattresses, and mats

How to Do It

How to Sanitize

- 1. Clean with soap and water, following the steps in <u>How to Do It Cleaning Surfaces</u>. This gets rid of dirt and grime so the sanitizer can work on any germs left behind.
- 2. Spray or wipe the surface with sanitizing liquid. Wait while the liquid sits on the surface for the correct amount of time.
- 3. Use a clean towel with fresh water to wipe away any chemicals left on the surface. Even if you don't see anything, sometimes there are still chemicals after the contact time. It is important to wipe chemicals away so that children do not touch them.

Choosing a Sanitizer

WAC 110-300-0005 defines sanitizing as using **one** of these options:

- Hot water.
- A fragrance-free chlorine bleach and water solution.
- Another sanitizer product that is registered with the EPA and used according to the instructions on the label.

For most people, bleach is the go-to sanitizer. However, bleach is a dangerous chemical, and it is important to use it correctly. If you use bleach, make sure to use the right amount for sanitizing (see Bleach).

If you use a sanitizing product other than bleach, the Department of Children, Youth, and Families (<u>WAC 110-330-0240</u>) must approve it. Use the <u>DCYF Sanitizer/Disinfectant Approval Request form</u> (PDF) to get approval to use the product.

There are <u>safer sanitizing products with the EPA Design for the Environment certification</u>. Look for safer products with active ingredients like ethanol, isopropyl alcohol, hydrogen peroxide, lactic acid, or citric acid.

Chemicals in sanitizing and disinfecting products can be dangerous. Children under the age of 18 should not use sanitizers or disinfectants, not even wipes.

Sanitizing with Hot Water

Hot water removes germs without any chemicals. For some items, you can use your dishwasher or washing machine to sanitize with hot water. Before using hot water to sanitize, check the manufacturer's instructions to make sure the product is dishwasher safe or machine washable.

Dishwasher

Items that are dishwasher safe can be sanitized in the dishwasher at high temperatures on the steam cycle. You can use the dishwasher to sanitize bottles, dishes, eating utensils, and even some toys. The dishwasher is a good option for many items that children put their mouths on.

Washing Machine

After washing dirty laundry, soft items can be sanitized with the "sanitize" or high heat setting on a washing machine or dryer at 140 degrees Fahrenheit or higher. You can use the washing machine to sanitize things like bibs, burp cloths, bedding and blankets, soft toys, or dress up outfits.

Disinfecting

What to Know

Disinfectants are strong chemicals that we use to kill germs. These chemicals can hurt our lungs, skin, eyes, and bodies. We need to use them safely to kill germs without hurting people.

There are times when you need to use disinfectants so that dangerous germs don't make people sick. These more harmful germs are in places where:

- There are body fluids (poop, pee, blood, vomit, and spit).
- A sick person has been. This includes anyone sick with a cold, flu, COVID-19, or other illness that can spread.

You always need to clean before disinfecting. Surfaces and objects must be clear of dirt, oils, and grime for disinfecting chemicals to get to the germs.

Disinfecting Chemicals Are Dangerous For Kids

Because these chemicals are so dangerous, it is important that children of any age never use bleach, sanitizers, disinfectants, or disinfecting wipes. No one under the age of 18 should use these chemicals.

What to Do – Disinfecting

Disinfect things that may have germs from body fluids (poop, pee, vomit, blood, or spit) or anything a sick person has touched. That means if someone has a flu, COVID-19, or diarrheal illness like a "stomach bug," you need to disinfect things that they touched, including some things you normally would not have to disinfect.

Table 4 gives examples of what to disinfect. See <u>NRC's Caring for Our Children</u>, <u>Appendix K (PDF)</u> to learn more about what to disinfect.

Table 4: What to Disinfect

- Changing tables
- Potty chairs
- Garbage cans
- Diaper trash cans
- Bathrooms
- Surfaces with body fluids (poop, pee, vomit, blood*, or spit)
- Anything a sick person has touched
- Areas that many people touch during the day such as doors, doorknobs, light switches, faucets, or any other areas that people touch often

Clean and disinfect changing tables after each use and bathrooms at least daily.

How to Do It

There are areas where you need to disinfect regularly. At other times, like when someone gets sick, you need to disinfect in the moment. Whether you disinfect as part of a regular schedule or on the spot, here is how to do it safely and correctly:

- 1. Always clean first. Disinfecting chemicals cannot get to the germs unless you clean off the dirt and grime first.
- 2. Get the fresh air flowing in the room. Open windows and turn on any fans or ventilation systems (see Ventilate).
- 3. Remove people from the room. When possible, disinfect when others are not around, especially children.
- 4. Use safety gear as required on a product's label. That may include glasses or goggles, gloves, and a long-sleeved overshirt. See <u>Disinfecting and Sanitizing with Bleach Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments (PDF)</u> for instructions on preparing bleach mixtures.
- 5. Apply the chemicals to the surface and make sure it stays wet for the contact time listed on the bottle (see <u>Contact Time</u>).
- 6. Wipe away any chemicals left over on the surface as directed by instructions on the label.
- 7. Keep the air flowing in the room until the smell is gone. If you smell the chemical, then you are breathing it into your lungs.
- 8. Store the chemicals safely, away from children and out of the sun.

See our section on bleach for more information on disinfecting with bleach.

^{*}When cleaning up blood or body fluids that may have blood, follow your child care's "Bloodborne Pathogen Exposure Control Plan." You may need a stronger disinfectant.

Choosing Disinfectants

WAC 110-300-0005 allows disinfecting using one of these options:

- A fragrance-free chlorine bleach and water solution.
- Another disinfecting product that is registered with the EPA and used according to the instructions on the label.

If you use a disinfecting product other than bleach, the Department of Children, Youth, and Families must approve it (<u>WAC 110-330-0240</u>). Use the <u>DCYF Sanitizer/Disinfectant Approval Request form (PDF)</u> to get approval for a disinfecting product.

Choosing Safer Products

Choose Safer Ingredients

There are many different types of sanitizers and disinfectants. Some are more dangerous to humans than others. Many chemicals in cleaning, sanitizing, and disinfecting products can:

- Trigger asthma, allergies, and breathing problems.
- Irritate your skin, eyes, nose, and throat.
- Cause headaches.
- Disrupt hormones.
- Increase risk of cancer.

To prevent these health impacts, use chemicals that are safer for humans. Look for products made with safer ingredients, like:



- Stabilized Hydrogen Peroxide. To disinfect, the hydrogen peroxide must be stabilized. This does not include regular hydrogen peroxide that is sold at drug stores. You can find stabilized hydrogen peroxide at cleaning supply stores.
- Citric acid.
- Lactic acid.
- Isopropyl Alcohol (Isopropanol).
- Ethanol.

Choose Safer Choice and Green Seal Products for Cleaning

Look for products that are third-party certified by Green Seal and EPA's Safer Choice. These labels make it easy to find products that are less dangerous. Products with these labels are made with ingredients that are safer for human health. By using Green Seal and Safer Choice products, you can avoid harmful chemicals.





Learn more about choosing safer products in the <u>University of Washington's fact sheet on Safer Cleaning</u>, Sanitizing, and Disinfecting Strategies to Prevent Infection Transmission.

Avoid Harmful Ingredients

There are many active chemicals that cause asthma and will harm your health. Avoid products with these ingredients:

- Ammonia (ammonium hydroxide)
- Quaternary ammonium compounds
- Chloramines
- Formaldehyde
- Thymol
- Peracetic acid
- Glutaraldehyde
- Quaternary Ammonium Compounds (also called "Quats"), including:
 - Alkyl dimethyl
 - o Benzyl ammonium chloride
 - o Benzalkonium chloride
 - Lauryl dimethyl
 - o Ammonium chloride
 - Dodecyl dimethyl
 - Ammonium chloride

Avoid products that say DANGER or POISON on the label. This means there are dangerous chemicals in the product that can harm your health.

Do not use products that are sprayed into the air (aerosols). They do not work to sanitize or disinfect and will harm you if you breathe in or touch the chemicals. You are not allowed to use aerosols during child care hours (WAC 110-300-0240, section D).

Read the Label

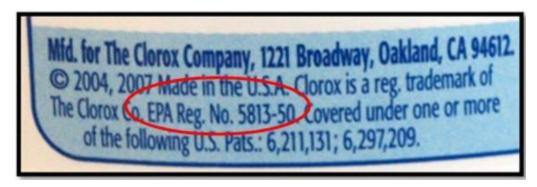
Always read the label on chemical products. The label tells you everything you need to know to use the product correctly and safely. It is important to follow the product's instructions so that it will remove or kill germs without hurting you. The label will tell you:

- How to use the product so that it works on germs.
- The contact time (how long the chemical must sit on a surface to work).
- The EPA registration number.
- The ingredients.
- How to keep yourself safe while using the product.
- The concentration of active ingredient (chemical).
- If the product is certified as EPA Safer Choice or Green Seal.

When using bleach follow the Department of Health guidelines: <u>Disinfecting and Sanitizing with</u> Bleach: Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments (PDF).

Look for the EPA Registration Number

For sanitizers and disinfectants, look at the label to check for an EPA registration number. Products with an EPA Registration Number are known to kill germs.



Check the EPA List

EPA has a list of disinfecting products that kill SARS-CoV-2, the virus that causes COVID-19. This is called List N. Use List N to:

- Find a disinfectant that kills SARS-CoV-2.
- Check the products you already have to see if they can kill SARS-Cov-2.

We recommend using a disinfectant on List N to protect your staff and children from COVID-19. But be careful: Not all products on List N are healthy, so use other information in this guide to help you pick a safer product to use against COVID-19.

Watch this EPA video to learn how to check if your products are on List N.

EPA has lists for products that kill other specific germs and prevent the spread of certain illnesses:

- List G: products that kill Norovirus.
- List H: products that kill MRSA.
- <u>List K: products that kill Clostridium difficile spores (C. diff)</u>, which can cause an infection of the colon that has symptoms like diarrhea.

Using Chemicals Safely and Correctly

The chemicals we use to sanitize and disinfect are dangerous. It is important to keep yourself safe when using sanitizing and disinfecting products. These guidelines apply to all chemicals, including sanitizers and disinfectants.

Use Safe Practices to Protect Your Health

Follow these steps to stay safe while using sanitizing and disinfecting chemicals:

- Put on safety gear as required on the product's label. Safety gear may include long sleeves, an apron, cleaning gloves, and safety glasses or goggles. Chemicals can irritate or burn your skin, and a splash in the eye can blind you.
- Have an eye wash station nearby. The law (<u>WAC 296-800-150</u>) requires you to have an eye wash station where you mix bleach with water or other strong chemicals. The Safety Data Sheet for the chemical will tell you if an eye wash is required. They are required when a chemical will damage eyes, skin, lungs, and most things that touch it. Even if not required, having an emergency eye wash is best practice. For more information, see <u>DOSH Directive</u> (<u>DD) 13.00 Emergency Washing Facilities (PDF)</u>.
- Do not breathe in the chemicals. Open windows or use fans or your HVAC system to air out
 the room while using chemicals. Do not stand near the chemicals and keep children away
 from the area while the chemicals work on the surface, to avoid breathing in the chemicals
 (see <u>Ventilate</u>).
- Only use what you need. It is important not to overuse chemicals. If you use more chemicals
 than you need, there is a higher risk of illness and injury. It also costs you more money. Only
 use as much as you need for the job.

Sanitizing and disinfecting chemicals, especially their concentrates, are dangerous. To keep yourself safe:

- Never allow children of any age near sanitizing and disinfecting chemicals.
- Never mix different kinds of chemicals together, especially bleach and ammonia. Make sure
 not to combine chemicals at any time, including while you use them and when you dispose of
 them (see Do Not Mix Chemicals).
- **Never** drink disinfectants, sanitizers, or any other chemicals. Keep them labeled and never put in old food containers to avoid confusion.
- **Do not** eat or drink while using chemicals.
- **Do not** touch disinfecting wipes with bare hands or use them on the skin. They are not safe like diaper wipes and can burn your skin. It is best to avoid using disinfecting wipes, but if you must use them make sure to wear gloves.
- Always properly label bottles containing chemicals.

Contact Time

It takes some time for chemicals to work on germs. The **contact time** or **wet time** is how long a surface must be wet with the chemical for it to work. Let the chemical sit for the full contact time so it can kill the germs.

- Each product may have a different contact time and disinfecting chemicals may take longer to work than sanitizers. Check the label to find out how long the chemical needs to sit on the surface to work.
- The chemical must sit on the surface for the full contact time to remove or kill germs. After applying the chemical, make sure to wait for the correct time while it works.
- Some chemicals might still be on surfaces after the contact time, even if the surface doesn't
 look wet. People can touch these remaining chemicals and get hurt. Read the label to see if
 you need to wipe or rinse the surface to remove left over chemicals after the contact time.
 Some safer disinfectants, like alcohol-based products, may not need to be wiped away.

Concentration

When it comes to chemicals, concentration matters. **Concentration** is the amount of the chemical that is mixed with water. Many chemicals are sanitizers in lower concentrations, and disinfectants at higher concentrations.

At times when sanitizing is enough, make sure to use only enough chemical to sanitize, called "sanitizing strength." You don't need to use "disinfecting strength" which uses more of the chemical. You only need disinfecting strength at times when you need to disinfect. Using the right concentration for the job prevents you from using too much of the chemical and protects you and the children you care for.

Bleach is a good example of when concentration matters. Bleach comes in different strengths on the store shelves, and it is important to check the percent Sodium hypochlorite on the label to get the right concentration. Then follow the directions on the <u>Department of Health's Disinfecting and Sanitizing with Bleach: Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments (PDF)</u>. See <u>Bleach</u> to learn more about using the right concentration of bleach.

Ventilate

When you spray chemicals on a surface, they also go into the air. If you can smell a chemical, you are breathing it into your lungs, which could harm your health. To stay safe, you need to ventilate (air out) the room to carry the chemicals away and outside. It is important to move the inside air outside and bring fresh outside air indoors. Here's how to protect yourself and others from breathing in dangerous chemicals:

- When using chemicals, keep the ventilation or HVAC system on, use exhaust fans, or open windows.
- Keep people, especially children, away from where you use the chemicals until the smell is gone.

Many people think the smell of chemicals means something is clean. This is not true. "Clean" does not have a smell. If you are smelling the chemical, it is getting into your lungs and may hurt you. Ventilation protects you from smelling and breathing in harmful chemicals.

Do Not Spray Chemicals in the Air

Spraying disinfecting chemicals into the air is dangerous. It spreads chemicals all around the room and doesn't help with disinfecting. When you breathe in chemicals that are in the air, they can get into your lungs. Never spray chemicals into the air and don't use foggers, misters, and aerosol or spray cans.

Do not use products that are sprayed into the air (aerosols). You are not allowed to use aerosols during child care hours (WAC 110-300-0240, section D).

When possible, do not set spray bottles to a fine mist. This puts more chemicals into the air and less on the surface to disinfect or sanitize.

Do Not Mix Chemicals

Keep chemicals separated when using them. Never mix them together, use them together, or dispose of them at the same time. When chemicals combine, they will make even more dangerous chemicals that have killed people in the past. Make sure to read the label and dispose of each chemical separately and exactly as the label says.

It is ok to mix water with bleach to get the right concentration. But make sure you do not mix bleach with anything else, especially other chemicals.

Store and Dispose of Chemicals Safely

Make sure to store your chemical products and other cleaning supplies out of sight and where children cannot reach them. Have a copy of the Safety Data Sheet (SDS) for each chemical you have. The SDS shows important health and safety information, so it is important to read it and the label for each chemical you use. You are required to have SDS for each chemical easily accessible so other adults know what dangerous chemicals are used at your child care. You can find Safety Data Sheets for all your products at chemicalsafety.com.

Chemicals are dangerous. Post the number for the <u>Washington Poison Center</u> in case of emergency: 1-800-222-1222. Keep this number somewhere you can find it quickly if someone accidentally drinks or gets hurt by chemicals. You can also order poison prevention materials from Washington Poison Center.

It is important to safely dispose of any leftover chemicals. Check the product label to find out how. You can also check the <u>Department of Ecology's website to find a hazardous waste disposal site</u>.

Bleach

Many people use bleach to sanitize and disinfect. Bleach is a dangerous chemical and is easy to misuse. Bleach must be used **safely** and **only by adults**. When not used safely, it can hurt your eyes, mouth, lungs, and skin. It can also cause breathing problems for people with asthma or other lung health concerns. Because bleach is so dangerous, it is important to be very careful and take safety precautions when using it.

It is best to look for safer alternatives based on hydrogen peroxide, alcohol, citric acid, or lactic acid. Learn more about choosing safer products in the <u>University of Washington's fact sheet on Safer</u> Cleaning, Sanitizing, and Disinfecting Strategies to Prevent Infection Transmission.

Concentration

Concentration is the amount of the chemical that is mixed with water. Many chemicals, including bleach, are sanitizers in lower concentrations and disinfectants at higher concentrations.

You need to use the right concentration of bleach for the job. That means depending on if you are sanitizing or disinfecting, you need to mix a different amount of bleach with water. To learn more about correctly mixing bleach solutions see <u>Disinfecting and Sanitizing with Bleach: Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments (PDF)</u>.

Bleach comes in different strengths on the store shelves, and it is important to check the percent of the active ingredient, sodium hypochlorite, on the label to mix the right concentration. Knowing this percentage will help you know how much of the bleach you need to mix with water to create the right concentration for the job. Once you know how much sodium hypochlorite is in your bleach, use the table in the <u>Guidelines for Mixing Bleach Solutions (PDF)</u> to help you mix the chemical with the right amount of water.

Make a fresh solution of bleach every day or make it in bulk every week and refill cleaning bottles every day. Using bleach test strips can help you make sure your bleach solution is strong enough to work on germs, but not too strong. Keeping your bleach solution only as strong enough as it needs to be to work limits possible health risks.



Example of active ingredient and concentration listed on a bleach label.

Use Bleach Safely

There are some things you should never do when using bleach:

- **Never** mix bleach with other chemicals or products. Do not put bleach on any surface with another chemical disinfectant or sanitizer.
- **Never** drink bleach or let it touch your skin. Use all the same precautions when using bleach-based wipes.
- **Never** spray a bleach solution into the air.
- Never buy scented bleach. Instead, look for bleach that says "fragrance free" on the label.

- Never allow anyone under the age of 18 to use or touch bleach or bleach solutions.
- **Never** use "splashless" bleach as it contains extra chemicals that can stay on a surface. Only use regular, fragrance free bleach.

The National Pesticide Information Center (NPIC) developed an infographic, <u>Using Bleach at Child Care Sites (PDF)</u>, to help you use bleach safely. Follow the tips on that infographic to make sure no one gets hurt or sick from bleach.

Resources

Hand Washing

- Germbuster Poster (English)
 https://www.doh.wa.gov/Portals/1/Documents/Pubs/130-012.pdf
- Germbuster Poster (Spanish)
 https://www.doh.wa.gov/Portals/1/Documents/Pubs/130-012-SP.pdf
- Germbuster Poster (Arabic, Bengali, Cambodian, Chinese, Hindi, Korean, Nepalese, Russian, Turkish, Ukrainian, and Vietnamese)
 https://doh.wa.gov/community-and-environment/food/food-worker-and-industry/hand-washing-signs
- CDC Handwashing video (English) <u>https://youtu.be/eZw4Ga3ig3E</u>
- CDC Handwashing video (Spanish) https://youtu.be/g 7HSIr94Vs

Choosing Safer Products and Ingredients

- Caring for Our Children, Appendix J: Selection and Use of a Cleaning, Sanitizing, or Disinfecting Product (English)
 https://nrckids.org/files/appendix/AppendixJ.pdf
- Responsible Purchasing Network March 2020 product recommendations for COVID-19 (English)
 - https://oshce.uw.edu//sites/default/files/documents/Updated%20Safer%20Disinfectants%2 OList March%2026,%202020.pdf
- Safer Cleaning, Sanitizing, and Disinfecting Strategies to Prevent Infection Transmission (English)
 - https://resources.oshce.uw.edu/1s6jug8/1
- Safer Cleaning, Sanitizing, and Disinfecting Strategies to Prevent Infection Transmission (Spanish)
 - https://resources.oshce.uw.edu/1pncebh/1
- Cleaning And Safer Disinfecting Comic Strips For Families (English, Amharic, Chinese, Korean, Portuguese, Russian, Somali, Spanish, Tagalog, Vietnamese)
 https://www.pehsu.net/Safer Disinfectants comic strips.html

General Cleaning, Sanitizing, and Disinfecting

- Caring for Our Children, Appendix K: Routine Schedule for Cleaning, Sanitizing, and Disinfecting (English)
 - https://nrckids.org/files/appendix/AppendixK.pdf
- Public Health Seattle and King County: Cleaning, Sanitizing, and Disinfecting (Resources in multiple languages)
 - https://kingcounty.gov/depts/health/child-teen-health/child-care-health/bleach.aspx
- Green Cleaning, Sanitizing and Disinfecting: A Checklist for Early Care and Education (English) https://wspehsu.ucsf.edu/wp-content/uploads/2015/10/Checklist2013.pdf
- Green Cleaning, Sanitizing and Disinfecting: A Checklist for Early Care and Education (Spanish)
 https://wspehsu.ucsf.edu/wp-content/uploads/2021/09/checklist_2021_espanol_0831.pdf
- Green Cleaning, Sanitizing, and Disinfecting: A Curriculum for Early Child and Education (English)
 - https://wspehsu.ucsf.edu/wp-content/uploads/2015/10/ECECurriculum.pdf
- Green Cleaning, Sanitizing, and Disinfecting: A Curriculum for Early Child and Education (Spanish)
 - https://wspehsu.ucsf.edu/wp-content/uploads/2021/09/curriculum spanish 0909b.pdf
- Informed Green Solutions: Cleaning for Healthier Child Care https://www.informedgreensolutions.org/cleaning-for-healthier-child-care