

Child Care Center
Health & Sanitation
Information

This is a general guide which can be used to determine if a Child Care Center is ready for a sanitation inspection and covers some of the general knowledge that is needed to be in compliance with the sanitation requirements found in Title 391 NAC 3 "Child Care Centers" and the Nebraska "Food Code" which Centers are required to follow.

Topics include:

- Kitchen:
 - o Equipment,
 - o General kitchen procedures,
- Cleaning vs. Sanitizing vs. Disinfecting,
- Toxic Chemicals/ Medications,
- Facility Safety Requirements,
- Water Supply,
- Toilets and Sinks,
- Handwashing,
- Beds, Cribs, and Sleeping Surfaces,
- Fenced Outdoor Play Area and Toys,
- Diapering

Kitchen:

All child Care Centers are required to be in compliance with Nebraska Food Code

Title 391 NAC 3-006.29 Food Safety: The licensee must ensure that the center complies with the Food Code whenever food is prepared and/or served on the premises of the center. If the center serves food prepared at another location, the licensee must ensure that the individual or organization preparing the food is in compliance with the Food Code. If the center provides infant formula, it must be made from commercially prepared products.

Kitchen equipment: The following pieces of equipment are required by Food Code (additional equipment may be necessary depending on your facility. If you have questions, please call and speak with your licensure representative or a sanitation inspector):

- **Floors, walls, and ceilings** must be smooth, durable, easily cleanable, non-absorbent for areas subject to moisture, such as food preparation areas, dish washing areas and kept clean. Walls may be drywall and painted a light color enamel. The floor wall juncture in these areas shall be covered and closed to an opening no larger than 1/32 inch. Utility service lines and pipes may not be exposed which would obstruct or prevent cleaning of the floors, walls, or ceilings.
- **Lighting:** Light bulbs shall be shielded, coated, or otherwise shatter resistant in areas where there is exposed food, clean equipment, utensils, and linens or unwrapped single-service and single-use articles.
- **Sanitization:** Utensils, dishes, and other food contact surfaces manually washed will be sanitized by use of approved chemicals or immersion (for at least 30 seconds) in hot water of at least 171°F. The most common sanitizer used is unscented household bleach. A test kit must be provided to determine sanitizer strength no matter which chemical sanitizer is used.
- **Equipment - Countertops, Tabletops:** Must be smooth, non-absorbent, easily cleanable, in good repair and kept clean. Wood countertops such as baker's tables of hard maple are

acceptable. Permanent countertops and sinks will be sealed to the walls with NSF approved silicone.

- **Refrigeration equipment:** Recommend commercial NSF approved equipment because of their rapid temperature recovery capability. However, refrigerators capable of maintaining foods at 41°F or below and freezers capable of maintaining frozen foods frozen are approved. Refrigeration equipment will be large enough to accommodate foods requiring refrigeration without overloading. Temperature indicating thermometers are required in all refrigeration units. They must be located in the warmest part of the unit.
- **Cooking/hot holding equipment:** Commercial NSF approved equipment is recommended, however, stoves, ovens, steam tables, etc., capable of cooking and/or holding the food at safe temperatures may be approved. A food temperature measuring device shall be provided to ensure attainment and maintenance of proper food temperatures.
- **Food contact surfaces:** Equipment and utensils shall be designed and constructed to retain their characteristic qualities under normal use conditions. Materials used in the construction of these items shall be safe, durable, corrosion resistant, and non-absorbent, and sufficient in weight and thickness to withstand repeated washings. The finish shall be a smooth, easily cleanable surface, resistant to pitting, chipping, grating, scratching, scoring, distortion, and decomposition.
- **Non-food contact surfaces of equipment** that are exposed to splash, spillage, or other food soiling, or that require frequent cleaning shall be constructed of a corrosion-resistant, non-absorbent, and smooth material.
- **Single-service items** (plastic silverware, beverage cups, etc.) shall be stored at least six inches off the floor in an approved area. Beverage cups shall be dispensed from an approved dispenser to avoid unnecessary bare hand contact with the lip-contact surfaces.
- **Food storage shelving - refrigerated food:** Any shelving not original must be nonabsorbent, such as plastic, wire or metal with slatted openings to facilitate air circulation.
- **Dry storage:** Shelving shall be wire or solid shelving. Wood shelves shall be adequately sealed, and shelves shall keep food at least six inches above the floor.
- **Exterior doors:** shall be solid, self-closing, and tight fitting.
- **Outdoor garbage and refuse storage:** Outdoor receptacles for refuse shall be durable, cleanable, insect and rodent resistant, leak proof, and non-absorbent. Receptacles shall be designed and constructed to have tight fitting lids, doors, or covers and kept covered. Outdoor storage area cleanliness shall be maintained.
- **Sinks- Hand washing sinks:** A hand washing sink shall be equipped with hot and cold running water with a supply of hand cleanser and disposal paper towels and shall be located to allow convenient use in food preparation, food dispensing, and dishwashing areas. This hand washing sink must be used for no other purpose except hand washing.
- **Sinks- Culinary sinks:** (food preparation) must be provided in kitchens where food preparation is completed.

- **Sinks- Dishwashing:** Utensils, dishes, etc., must be (1) washed; (2) rinsed; (3) sanitized; and (4) air-dried. This may be accomplished by the use of an approved dishwasher or manually washing in an approved three-compartment sink provided with drain boards. Hot water generation and distribution systems must be sufficient to meet the peak hot water demands.

To summarize sink requirements:

- *The kitchen must have a hand washing sink, with its own faucet which shall be used for no other purpose.*
- *If food preparation is completed in the kitchen there must be a sink available for food preparation.*
- *If a dish machine is not available there must also be a three compartment sink available to wash dishes. These sinks may share faucets.*
- *With an approved dishwasher there must still be two sinks each with their own faucets available in the kitchen (hand washing and preparation)*
- *Without an approved dishwasher a minimum of 4 sinks are required with at least two faucets. The food preparation sink can be dual purposed for dishwashing, but it must be washed, rinsed and sanitized between tasks.*
- *A mop sink is also suggested, but if there is not one available the floors must be cleaned in a way that prevents contamination in the kitchen.*

To summarize dishwasher requirements:

- *Mechanical dishwashing machines must be able to sanitize the dishes/utensils washed. There are 2 approved way to sanitize:*
 1. **HIGH TEMPERATURE:**
 - *If high temperature is used a single tank, stationary rack, dual temperature machine is used it must reach 150°F (or manufactures' minimum temperature) during the wash cycle and 180°F during rinse cycle.*
 - *If a single tank, conveyor machine is used the machine must reach 160°F (or manufactures' minimum temperature) during the wash cycle and 180°F during rinse.*

***When using heat as a sanitizer no matter what the gauges on the machine say the plate much reach 160°F.**

 2. **Chemical Sanitization:**
 - *Use 50-200 ppm chlorine; or 200 ppm quaternary ammonia (the machine must be operating according to manufacturer's specifications which should be posted on the machine)*
 - *Air dry utensils and equipment*
 - *Use appropriate test strips to check concentration of sanitizer in machine*

Most residential dish machines will not meet these requirements. **Before purchasing a machine make sure it is NSF approved to meet these requirements.** If the machine you purchase does not reach these minimums it is not sanitizing and cannot be used as a sanitizer in a child care facility.

If the facility purchases an NSF residential approved unit all of the plates, cups, bottles, utensils, pots, pans, etc. from each meal must be able to fit inside the machine in one load. Running the machine on the sanitizing cycle frequently results in longer wash times (2 or more hours). In most cases staff is not available to come back hours later to put away and start another load of dishes. IN addition, the accumulation of dirty dishes creates a risk for cross-contamination and can attract bugs.

An NSF approved commercial dishwashing unit or a 3 compartment sink is required in all centers that constantly provide care for more than 20 children. Residential dish machine are unable to keep up with demand and will not be approved for centers whose licenses exceed 20 children, unless there are extenuating circumstances which will have to be review and approved on a case by case basis.

Wear and tear on these residential units can be above average because of the number of loads that have to be run daily in a Child Care Center. The initial purchase price of a residential unit may be appealing but it will have to be replaced sooner than most commercial units and the time needed to run a load of dishes can be an inconvenience. Commercial dishwashing machines can be run for a much shorter period of time and are designed to be operated a number of times per day making them a more practical choice in most Child Care Centers.

Kitchen procedures: These are a few of the major processes a sanitarian will review while completing an inspection. There is a great deal of information in food code and we strongly recommend that providers become familiar with it. Food safety classes are provided throughout the State to assist food works in this regard. To get specifics, contact your local sanitarian. If you have questions about other procedures you can contact your inspector or check food code and the additional resources the Department of Agriculture makes available on their website at: <http://www.nda.nebraska.gov/> then go to the "Food Safety & Consumer Protection" tab on the left to choose which topic you are interested in reviewing.

- Hand washing: Hands must be washed: after touching bare human body parts other than clean hands and clean, exposed portions of arms, after using the toilet room, after caring for or handling service animals or aquatic animals, after coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating, or drinking, after handling soiled equipment or utensils, during food preparation, as often as necessary to remove soil and contamination and to prevent cross contamination when changing tasks, When switching between working with raw food and working with ready-to-eat-food, before donning gloves for working with food, and after engaging in other activities that contaminate the hands.
- Single Use Gloves: Glove usage does not replace the need for good hand washing practices. Hands must be washed before putting gloves on. Put gloves on only when you are ready to handle ready-to-eat food. Use gloves for only one task, such as ready-to-eat foods, then discard. If an interruption occurs during food preparation, remove and discard gloves. Use clean gloves when you resume food preparation and wash hands before putting them on. Dispose of gloves immediately upon removal. Single-use gloves should not be used around heat or hot fats. Gloves are susceptible to contamination, so discard when soiled or damaged. Fabric or reusable gloves may not be used with ready-to-eat food. Avoid single-use gloves made of natural rubber latex. Children at child care centers, because of their age, are a high risk group so there cannot be any bare hand contact with ready to eat food. Gloves, utensils or other measures must be taken to prevent any bare hand contact with ready to eat foods.
- Food Protection: Food stored in a refrigerator, freezer or in dry storage must be protected from contamination by packaging or covering. Potentially hazardous foods (defined below) must be properly stored so they will not contaminate other products in the refrigerator (example raw meats must not be stored over vegetables).

Food must be kept out of the temperature danger zone (41°F-135°F) as much as possible. For example if you are preparing two different products for lunch leave everything in the refrigerator until it is needed and place back in refrigerator as soon as you no longer need the product.

- **Potentially hazardous foods (PHF):** PHF is any food or food ingredient (natural or synthetic) capable of supporting rapid growth of microorganisms. This includes meats (beef, pork, chicken and eggs, seafood and products made with them), dairy products (including bakery items with dairy products inside), cut/prepared fruits and vegetables (not PHF until cut or prepared), potatoes, and prepared pastas/rice. To get a complete list ask your sanitation inspector.
- **Temperature danger zone:** Is the range at which there is rapid bacteria growth. It is from 41°F to 135°F. Potentially hazardous food should not be exposed to danger zone for more than four hours total, including time spent in preparation, cooling, and reheating. In other words keep cold foods cold and hot foods hot. If a food product is allowed to go into the temperate danger zone it must be used and discarded within 4 hours of leaving a safe temperature range.
- **Cooking:** Make sure your facility has the cooking temperature chart available and that each PHF that is served to the children reaches the minimum cook temperature by checking it with a thermometer.
- **Cooling:** If a food product is being cooled, cold pasta salads or leftover casserole from lunch it must be cooled very quickly to prevent bacteria growth. Foods must be cooled from 135°F to 70°F within 2 hours and then down to 41°F or less within an additional 4 hours (total of 6 hour cooling process). When cooling in refrigerator the food product must still be covered, but do not cover tightly. Allow air flow by leaving a corner loose or other means.
- **Date marking:** Foods prepared on-site and refrigerated, or purchased after opening the original container that are potentially hazardous, ready-to-eat, and held for more than 24 hours must be marked with the discard date. Foods are allowed to be held for (7) days if held at 41°F or less and four (4) days if held between 41°F and 45°F. Most residential refrigeration units cannot maintain a constant temperature of 41°F or less, as a result foods can only be kept for 4 days once prepared/opened. The 7 day hold time is best reserved for NSF approved commercial refrigeration units.

Important to note, any time in the refrigerator counts against the product. In other words if a potentially hazardous, ready-to-eat food is frozen it must be marked with the length of time refrigerated before frozen. When food is removed from the freezer, mark with a "consume by" date that is seven (or four, if held at 45°F) days minus the length of time food was refrigerated before being frozen.

- **Storage of Breast Milk and Formula:** All prepared formula or breast milk must be refrigerated and clearly labeled with the child's name, date received, and date expressed and date frozen if applicable. Unused prepared formula must be discarded as indicated by the label. Unfrozen breast milk must be discarded after 48 hours and stored in the refrigerator in a way that will not contaminate other products (bottom shelf in a leak proof container). Frozen breast milk must be kept in a freezer for no more than three months.
- **Re-serving:** After being served (placed on the table) food that is unused or returned may not be offered for human consumption again. This includes any leftover milk which was on the table during the meal. All food items, including milk, once placed and left on a table during meal time must be considered "served." Once food is served and returned it may not be offered again, to the same or a different person. This includes milk in a pitcher with a lid, in a sippy cup or bottle. Once the cup or bottle of milk, juice or water has been given to a child it

must be used during that meal or discarded. It must not be put back in the refrigerator, even if the same child will get the product later. The only exceptions are a container of food that is not potentially hazardous (time/temperature controlled for safety) may be re-served if the food is dispensed so that it is protected from contamination and the container is closed between uses, such as a narrow-neck bottle containing catsup, steak sauce, or the food such as crackers, salt, or pepper, is in an unopened original package and is maintained in sound condition.

- Restrictions: Don't let employees work with exposed food if they are suffering from the following symptoms: diarrhea, vomiting, fever, jaundice, sore throat with fever, infected wound (i.e., cut, lesion, or both). Exclusions: Do not allow individuals with confirmed cases of Salmonella typhi, Shigella spp., E. coli 0157:H7, or Hepatitis A virus in the kitchen.
- Sanitizing: Sanitizing can help prevent disease transmission, contamination and/or spoilage. Sanitizers are strong enough to kill bacteria currently present on a surface, but is not strong enough to leave a residue that will continue to kill germs into the future. Sanitizers should be checked frequently to ensure they are the correct strength. Chlorine should be 50-100ppm, Quat 200-400ppm. Each Child Care Facility must be able to provide a testing method to test their sanitizer. Sanitizing is required for all lip/food contact surfaces. Examples are cups, plates, pot, pans, tables where meals are served, etc.

Cleaning vs. Sanitizing vs. Disinfecting:

Cleaning- Cleaning physically removes food or soil from a surface usually with the aid of soap, water and some muscle power. Cleaning does not kill bacteria it degreases and removes debris only.

- Can be done on any surface at any time (during or before/after) child care.

Sanitizing- Sanitizing takes cleaning a step further by reducing the number of bacteria and other microorganisms. Sanitizing can help prevent disease transmission, contamination and/or spoilage. Sanitizers are strong enough to kill bacteria currently present on a surface, but is not strong enough to leave a residue that will continue to kill germs into the future. When sanitizers are mixed correctly they are non-toxic and can stored out of reach throughout the facility, they do not need to be locked up. Sanitizers should be checked frequently to ensure they are the correct strength. Chlorine should be 50-100ppm, Quat 200-400ppm. Each Child Care Facility must be able to provide a testing method to test their sanitizer.

- Sanitizing is required for all lip/food contact surfaces. Surfaces that may get put in a child's mouth should also be sanitized.

Disinfection- Disinfectants are a strong enough concentration that they kill all the bacteria on a surface and will leave a residue on the surface that will continue to kill bacteria/viruses into the future. This residue, like the product itself is toxic. Disinfectants must be locked up when not in use. (The only exception is: there must be one bottle of disinfectant present at all changing stations, which is kept out of reach of children).

- Disinfecting should be done on all diaper changing stations, between each use. It should also be done in bathrooms and on floors, but only when children are not present.
- If it is required/suggested that a surface/object that could come in contact with food or a child's mouth be disinfected a disinfectant may be used on the surface, as long as the object/surface is rinsed with water after the disinfectant has been allowed to dry. This will remove any residual residue which may be toxic.

Toxic Chemicals/ Medications:

All toxic chemicals must be behind lock and key when not in use and children are present. We define toxic by the statement "Keep out of Reach of Children." Any product with this warning label must be locked up when not in use. The only exceptions are:

1. There can be one bottle of disinfectant kept out of reach at each diaper changing station and
2. Lip balm, petroleum jelly, hand sanitizers, sun block and diaper ointment do not need to be locked up, but if they are not locked up they must be kept out of the reach of children.

All prescription and non-prescription medications must be kept in locked storage at all times children are in care. There must be a separate locked storage provided for medications requiring refrigeration. All medications must be kept in the original container and stored according to instructions, clearly labeled for the named child, and returned to the parent when no longer needed.

Facility Safety Requirements:

- Surfaces including floors, walls, and attached equipment must be smooth and free of sharp edges, mold, or dirt, and the environment must be kept free of other conditions which may pose a potential risk.
- Insect, rodent, and animal control prevention. The entrance, harborage, or breeding of rodents, flies and all other insects and vermin must be prevented. All doors opening to the outside must be self-closing (except sliding doors). All windows used for ventilation must be screened.
- Pets. If pets will be allowed on the premises speak with your child care inspection specialists about necessary documentation and restrictions.
- Heating, ventilation, and lighting in all rooms used for child care must be adequate to protect the health of children.
- Firearms, other potentially hazardous weapons, weapon accessories, and ammunition must not be on the premises of the center, unless the center is located in a private residence. If the center is located in a private residence, all firearms, other potentially hazardous weapons, weapon accessories, and ammunition must be kept in locked storage. Firearms must be unloaded and ammunition must be stored separately from firearms.
- Electrical outlets within reach of children under age six must be covered with safety caps, ground fault interrupters, or have safety outlets installed.
- Shared use of the following items is prohibited: disposable towelettes, drinking containers, cups, or glasses; personal care items such as toothbrushes and hair brushes; and towels and washcloths.
- Storage must be clean and adequate for all personal items of children. Must be covered and waterproof for soiled or wet clothing; and for staff and children's storage, areas separate from where food and medication are kept.

- Deep freezers that cannot be opened from the inside must be locked or stored in a locked room.

Water Supply:

Water supply to all hand washing and bathing locations must reach a minimum of 100°F and must not exceed a maximum of 120°F.

Toilets and Sinks:

The center must have sufficient toilets and sinks available for children's use.

- A minimum of one operable toilet and one operable sink must be available per 15 children two years of age or older.
- Toilet rooms must be fully enclosed with self-closing doors and toilet paper dispensers used, in good repair and convenient for the children's use.
- A sink must be readily available to each toilet and diaper changing area.
- Paper towel dispensers and waste receptacles must be provided for paper towels and must be installed at heights convenient for the children's use.

Toilets and sinks must be:

- Conveniently located;
- Clean, operable, and in good repair;
- Must be soap available at hand sinks;
- Designed to accommodate children with special needs, when applicable; and of suitable height for children or have a safe stepstool.
- If a door to the toilet room opens directly from a food service area, the door must be self-closing and tight-fitting.
- Hand washing sinks must never be used to wash dishes, bottles or any purpose other than hand washing.

Hand washing:

Proper hand washing is defined as: "washing and scrubbing the hands for at least 20 seconds with soap and warm running water, rinsing well under running water, and drying with a paper towel, air dryer, or clean towel."

- The licensee must ensure that no adult or child resumes work or play after using the bathroom without first washing his/her hands.
- Proper hand washing is done after each diaper change.
- Proper hand washing by the provider and the child is done each time a child is helped with toileting.
- All individuals must properly wash their hands before giving or applying any medication. If handling any bodily fluids is involved, individuals must properly wash their hands after giving or applying medication.

Beds, Cribs, and Sleeping Surfaces:

- Cribs, playpens, cots, and mats must be separated by at least three feet of space and are for use by one child at a time.
- Cribs, playpens, cots, and mats must be disinfected daily or marked for individual use and disinfected weekly or more often when needed.
- Napping mats and mattresses which have torn must be replaced.

Fenced Outdoor Play Area and Toys:

When care is provided to children between the ages of six weeks and school-age, the licensee must ensure that a fenced outdoor play area is available. Fence is defined as a continuous barrier, including a wall, at least 36 inches in height, flush with the ground, and without any gaps greater than 4 inches that would allow a child to exit the fenced area. The area must directly adjoin the center or have a Department-approved plan to reach the play area safely.

Grounds must be:

- Sloped or drained to prevent stagnant water collection;
- Be kept clean and safe and contain no accident hazards, debris, or stagnant water;
- Contain no barnyard animals and/or fowl;
- Be free of animal waste;
- The fence and all toys and equipment within the fenced area must be free of rust and free of sharp and hazardous edges;
- Stationary outdoor equipment such as climbing apparatus, swings, or slides are located away from traffic areas in the outdoor play area;
- Stationary outdoor equipment is securely anchored, unless designed to be portable;
- Swing seats must be made of a pliable material. Seats must not be made of hard plastic, wood, or metal; and
- The area under climbing equipment, swings, slides, and other equipment from which children might fall must be of resilient material such as sand, dirt, grass, rubber matting, rubber mulch, wood chips, or small-to-medium size gravel.

Diapering procedure:

Diapering must be done in a way which is safe and sanitary for both the provider and the child. We suggest the following diapering plan:

1. Lay the child on the designated diapering surface. Diaper changing should only occur at this designated spot.
2. If disposable gloves are used they should be put on.
3. Remove the diaper and any clothing that has been soiled. Throw diaper away if disposable, if reusable diapers are used the diaper and any soiled clothing must be stored in a water and air-tight container. Do not rinse or clean them out at this time. You must first finish taking care of the child. Never leave a child unattended, not even for a moment.
4. Clean the child's bottom thoroughly with a baby wipe and dispose of the wipe.
5. If disposable gloves are used this is where they should be removed. If your hands have been soiled they should be wiped off with a baby wipe.
6. Put a clean diaper on the child.
7. Wash the child's hands and return the child to a supervised area.
8. Clean and disinfect the diapering surface and equipment.
9. Wash your hands thoroughly, using proper hand washing technique. Even if disposable gloves are used while diapering hands must be washed using proper hand washing procedures when the diapering process is complete.

Protection of Public Health when Public Water Systems are Operating under "Boil Water Ord.r" Advisories

During the period of time when the Boil Water Order is in effect the Agency for Toxic Substances and Disease Registry (ATSDR) recommends the following precautions be taken to protect public health.

General Precautions:

- Provide bottled drinking water for all uses at all times.
- Do not use drinking water fountains, hand sinks or showers. Turn off the water supply to these fixtures. If the water cannot be turned off take other actions to prevent use such as covering the fixtures or preventing access.
- Provide hand sanitizer for use in bathrooms and other areas as appropriate.
- Leave all toilets and urinals in operation. Non-potable water can be used in these fixtures.

Kitchen and food preparation area:

- Contact the sanitarian who inspects your food service area to provide assistance about meal preparation, cooking and dishwashing.
- Reduce food preparation to manageable levels until the boil water order has been lifted. Consider bringing box lunches from home, or catering meals from an approved food facility.
- Wash hands with soap under running bottled water, or water that has been boiled 1 minute, before and during food preparation. Use hand sanitizer after washing hands. Wear gloves during food preparation.
- Use bottled or boiled water to wash and prepare food,
- Use boiled water for wash, rinse and sanitize steps in a three compartment sink when washing cooking and eating ware. Sanitize at a chlorine concentration level of 100ppm. If a quaternary ammonium sanitizer is being used, the concentration level must be from 200-400 parts per million (ppm).
- Hot water sanitizing dish washing machines can be used if they are checked to ensure that the final rinse reaches a temperature of 180 degrees Fahrenheit or higher.
- Do not use:
 - directly plumbed carbonated fountain drink machines, beverage dispensers, ice machines, and low-temperature/chemical sanitizing dishwashers.
 - piped water to wash produce, or to make food or ice.
 - piped water to wash or sanitize food contact surfaces or to sanitize wiping cloths.

After the Boil Water Order has been lifted follow applicable potable water system guidelines to:

- Clean and sanitize ice machines, and all beverage dispensing machines that are connected to the water lines prior to use.
- Flush fixtures (i.e. faucets, drinking fountains) for several minutes and restart.
- Drain, disinfect, and refill water storage tanks if needed.
- Run water softeners through a regeneration cycle.

For more information contact:

- Sue Casteel, ATSDR Region 7 Regional Representative at (913) 551-1312 (office).
- Jill Shigart, ATSDR Region 7 Regional Representative, at (913) 551-1311 (office).
- Ida Walker, Environmental Director, Omaha Tribe Environmental Protection Department at (402) 846-5166.
- Skipper Qu, Sanitarian, Nebraska Department of Health and Human Services, Division of Public Health, at (402) 370-3284 (office).

It's Clean, But Is It Sanitized?

The countertop or meat slicer may look sparkling clean but the surfaces may be contaminated with bacteria waiting for an opportunity to contaminate foods and possibly make people sick. All food contact surfaces should be cleaned first, then sanitized.

Cleaning vs. Sanitizing: What's the Difference?

Cleaning physically removes food or soil from a surface usually with the aid of a detergent, water and some muscle power. Cleaning agents include detergents, solvents, abrasive cleaners, acid cleaners or some combination of these. Read the manufacturer's product description to help you choose the cleaning agent that best serves your cleaning needs.

Sanitizing takes cleaning a step further by reducing the number of bacteria and other microorganisms. Sanitizing can help prevent disease transmission, contamination and/or spoilage. Sanitizing, however, is not a substitute for cleaning. In addition, a sanitized surface is not *sterile* or completely free of bacteria. Sterilization is impractical for a foodservice facility.

Why Sanitize?

Contaminated surfaces can contaminate foods. A contaminated cleaning cloth, in turn, can do more harm than good. Bacteria can thrive in damp, food-contaminated cloths.

As shown in the table, researchers found more bacteria present on food preparation surfaces *after cleaning* due to cross-contamination by the cleaning cloth. Sanitizing with an appropriate agent reduced the number of bacteria to zero or an acceptable level.

Equipment surveyed	After preparing food	After cleaning	After sanitizing
Serving surface	7	>300*	0
Refrigerator shelf	13	86	0
Meat cutting board	27	120	0
Sandwich counter	55	70	0
Meat slicer	120	>300	41
Pastry counter	>300	>300	0
Salad sink	>300	>300	0

*300 is the maximum number of bacteria that can be accurately counted in a standard plate count.
Source: Letters in Applied Microbiology 16:173-177, 1993.

IMPROPER COOLING IS THE MAJOR CAUSE OF FOODBORNE ILLNESS

Hot food must be cooled from 135 °P to 70 °P within 2 hours, and from 135 °P to 41 °P within a total time of 6 hours

- - - Never cool food at room temperature.
- - - Uncovered containers cool faster than covered containers.
- — Stirring hot foods rapidly increases the cooling rate.

2 GREAT WAYS FOR COOLING FOODS RAPIDLY!

Shallow is better!

1. Separate foods into small quantities and place them into shallow pans made of aluminum or stainless steel. The food should be no deeper than 3 inches (2 inches for thick foods), and no more than 2 gallons of liquid in a stock pot.
2. Place the pan into an "ice bath" (a sink or large container) filled with ice at least three times the amount of food to be chilled, or place in a freezer.
3. Stir the food every fifteen minutes. Once it reaches an internal temperature of 70°P within 2 hours, place it into a refrigeration unit. After it is cooled, tightly cover food.
4. Check the temperature periodically and stir, to be sure it reaches 41°P in 6 hours.

Use a freeze stick for soups and chowders!

1. Pour hot liquids (no more than 2 gallons) into a large pot, then stir the liquid with a freeze stick every 15 minutes.
2. Additional freeze sticks may be necessary to reach 70°P within 2 hours. Leave a freeze stick in the pot and place it in the walk-in cooler.
3. Check the temperature periodically and stir, to be sure it reaches 41°P in 4 hours.

Using Sanitizing Agents

Sanitizing may be accomplished manually or with equipment such as dishmachines using heat (as steam or hot water) or chemicals. When heat sanitizing, using a higher temperature generally shortens the time required to kill bacteria. According to the 1995 Food Code, the temperature/time requirement for the sanitizing step in manual dishwashing is 171°F for at least 30 seconds.

Chemical sanitizing generally involves either immersing the object in a sanitizing solution for a specific amount of time or spraying/wiping the object with the solution and allowing it to air-dry. Chemical sanitizers differ in their effectiveness on certain organisms and in the concentration, temperature and contact time required to kill bacteria. Common chemical sanitizers include chlorine, iodine and quaternary ammonium compounds or "quats." Scented bleaches are not recommended as sanitizers.

Sanitizing solutions *must* be correctly prepared to be effective. Follow the manufacturer's instructions when preparing sanitizing solutions, and check the concentration of the sanitizer using a test kit. Using too high a concentration can result in off-flavors or odors in foods, can corrode equipment, waste money and violate local health department rules. Also closely follow the temperature recommendations for sanitizing agents.

How to Test Sanitizer Concentration

Test paper method:

1. Prepare sanitizing solution according to the manufacturer's directions.

2. Tear off a small strip of test paper, or use a pre-cut portion.

3. Dip test strip in sanitizer, or touch the strip to a plate treated with the sanitizer.

4. To determine concentration, compare the color of the strip to the chart included with the test kit.

When using combination products, such as detergent-sanitizers, cleaning and sanitizing must be done in two separate steps. First use the detergent-sanitizer to clean, then prepare another solution of the same agent to sanitize.

Five steps to sanitary

1. Pre-soak or scrape and rinse with detergent (at least 110°F).
2. Rinse with clean hot water.
3. Sanitize in an appropriate temperature/ concentration solution. Rinse, the hot water same time must be at least 171°F for 30 seconds.

5. P. ir-df/-

Don't Cross Contaminate With Clean; Contaminate ng Cloths

- Use separate cloths for cleaning and sanitizing.
- Store cleaning cloths in separate containers.
- Prepare fresh sanitizing solution between uses.
- Use regularly.

Julie Garden-Robinson, Ph.D.,
Food and Nutrition Specialist

References: Food Code, Food and Drug Administration, 1995; Applied Foodservice Sanitation, 4th Edition, National Restaurant Association, 1992.

This material is based upon work supported by the Extension Service, U.S. Department of Agriculture, under special project number 95-EFSF-0-3400.

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Wash Your Hands!

•Lave
se
las
manos

•Lave
las
manos
por
20
segundos

•Lave las manos

Wash for 20 seconds
Lavese las manos por 20 segundos

Dry
Sequese las manos

Turn Off Water with Paper Towel
Cierre el grifo usando una toalla de papel

.. notes from a sanitarian:

DISCARDING "LEFTOVERS"

When serving family style at a Child Care Center any leftover milk which was on the table during the meal must be disposed of. All food items, including milk, once placed and left on a table during meal time must be considered "served." Once food is served and returned it may not be offered again, to the same or a different person according to Nebraska Food Code 3-306.14. This includes milk in a pitcher with a lid, or in a sippy cup or bottle. Once the cup or bottle of milk, juice or water has been given to a child it must be used during that meal or discarded. It must not be put back in the refrigerator, even if the same child will get the product later. Once the child has taken a drink of the product it is likely that microorganisms were introduced and once inside the product they will begin to multiply to numbers that can be dangerous.

SANITIZING BOTTLES AND SIPPY CUPS

Sippy cups and bottles have to be washed just like any other dish or plate. They have to be washed, rinsed, sanitized and air dried after each use. Even if the same child will use the bottle or cup later it has to go through this process to ensure all of the bacteria it may have been exposed to have been killed before it can be used again. When cleaning with a bottle washer make sure the bottle washer is able to sanitize the bottles. Many bottle washers clean but are not able to reach commercial sanitization levels (which is different than residential). If the bottle washer doesn't commercially sanitize, after the bottle has been washed it must be immersed in sanitizing solution (chlorine 50-100ppm, Quat 200-400ppm or hot water which can sustain a temperature of 171°F) for at least 30 seconds and then placed on a rack to allow it to air dry.



More information can be found:

Nebraska food code: "3-306.14* Returned Food and Re-Service of Food." "(A) Except as specified in (B) of this section, after being served or sold and in the possession of a consumer, food that is unused or returned by the consumer may not be offered as food for human consumption."

<http://www.dhs.gov/ncsl/food-safety/food-safety-07-food-qr-fc-0111>

National Health and Safety Performance Standards; Guidelines for Early Care and Education Settings. Third Edition, 2011 4.9.0.4 pg 191 "Food returned from individual plates and family style serving bowls, platters, pitchers, and unrefrigerated foods into which microorganisms are likely to have been introduced during food preparation or service, should be immediately discarded." <http://www.dhs.gov/ncsl/food-safety/food-safety-07-food-qr-fc-0111>

List of Time-Temperature Control for Safety (TCS) Foods

(previously known as Potentially Hazardous Foods)

Meats

Bacon - in raw form
Beef - ground, roasts, steak
Gravy
Ground meats - all
Hot Dogs
Lunch meat
Meat casseroles
Pork - ground, ham, roasts
Processed meats - all
Sausage
Soups
Stews

Poultry

Chicken - ground, roasted
barbequed, fried
Chicken - nuggets, patties, strips
Casseroles with chicken/turkey
Dressing
Gravy
Precooked, processed products
Turkey - ground, roast
Soups
Stews

Seafood

Fish, Salmon, Tuna

Bakery Foods

Cream pastries
Cream/custard pies and tarts
Pudding prepared from a
mix or scratch

Dairy Foods

Whipped butter/whipped margarine
Cheese - mozzarella, cottage,
cream cheese, Ricotta
Cream, real
Cream sauce, white sauce
Dairy whipped topping
Ice cream
Milk

Pasta

Noodles - all kinds, cooked
Rice - cooked

Eggs

Egg casseroles, Egg dishes
Deviled eggs
Fried eggs
Hard-cooked eggs
Omelets
Scrambled eggs

Fruits and Vegetables

Dry beans - cooked
(examples - navy, refried, baked beans, etc.)
Potatoes - baked, boiled
mashed (fresh, instant)
scalloped/augrati n (fresh, dehydrated)
Cut/prepared fresh fruits and
vegetables, including melons,
tomatoes and salad greens

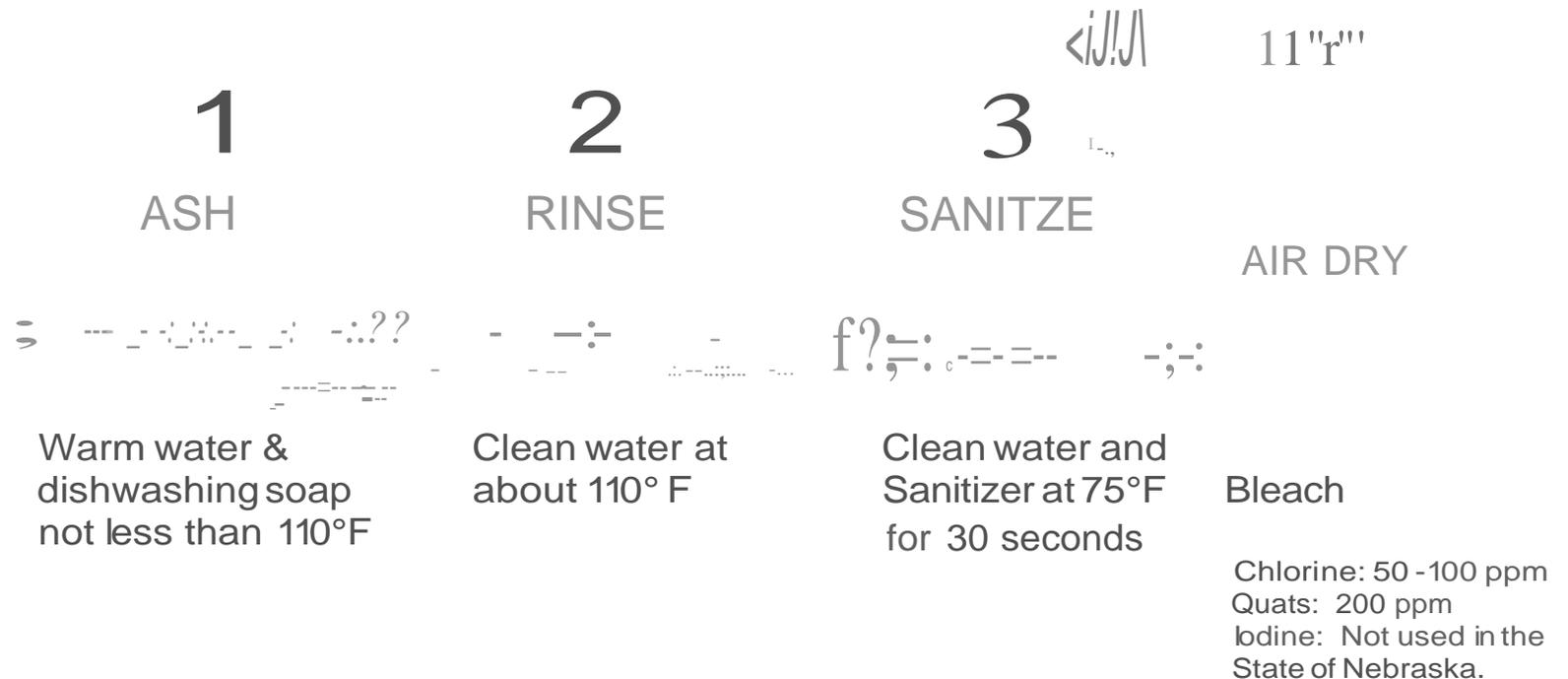
Misc.

Salad dressings prepared from a mix

Manual Dishwashing:

3 COMPARTMENT SINK DISHWASHING

SCRAPE



READ THE LABEL AND TAKE THE FOLLOWING STEPS TO ENSURE SAFETY IN YOUR CHILD CARE FACILITY

For more information on bleach solutions or to request bleach pumps for mixing bleach safely, contact 402-441-6220 or healthychildcare@lincoln.ne.gov

Information adapted from Oregon Health Authority.



Temperature Rules! Cooking for Food Service

165 °F (15 seconds*)

- Poultry - chicken, turkey - whole, parts or ground
- Soups, stews, dressing, casseroles, mixed dishes
- Stuffed meat, poultry, fish and pasta
- Leftovers (to reheat)
- Food, covered, cooked in microwave oven (hold covered for 2 minutes after removal)

155 °F (15 seconds)

- Hamburger, meatloaf and other ground meats; ground fish
- Fresh shell eggs- cooked and held for service (such as scrambled)

145 °F (15 seconds)

- Beef, corned beef, pork, ham - roasts (hold 4 minutes)
- Beef, lamb, veal, pork - steaks or chops
- Fish, shellfish
- Fresh shell eggs - broken, cooked and served immediately)

135 °F (15 seconds)

- Precooked, processed commodity foods (items containing meat, cheese, eggs)
- Ready-to-eat, canned foods and foods from intact packages (such as frozen soups or hot dogs, from a commercial processor)
- Ham, other roasts -processed, fully-cooked (to reheat)
- Fruits and Vegetables that are cooked

Hold all hot food at
135 °F or above
after cooking

41 °F or below

- Correct holding temperature of potentially hazardous foods (cold)

* Hold at specified temperature or above for 15 seconds unless otherwise stated.

The Temperature Danger Zone: 41° - 135°

USDA

United States Department of Agriculture

Revised: November 2005

GUIDELINES FOR THAWING FOODS

Introduction	Thawing or defrosting foods is a critical control point to prevent foodborne illness. During thawing, take care to avoid cross contamination and to minimize time in the temperature danger zone (between 41 degrees F and 135 degrees F).
Proper thawing Methods	Thawing foods properly can be done in any of these four ways: <ol style="list-style-type: none">1. In a refrigerator at 41 degrees F or below,2. Use a microwave,3. As part of the cooking process, or4. Under running water at 70 degrees F or less.
In a refrigerator At 41 degrees F	Thaw food in a refrigerator at 41 degrees F or below. This is one of the safest to thaw foods. However, there are a few reminders: <ul style="list-style-type: none">• Thaw raw foods below ready to eat food so that drippings do not contaminate food.• Be sure to use a drip pan under the food being thawed so that the drippings do not contaminate the unit.• Plan ahead. This method can take longer for frozen foods; turkey may take 24 hours or more.
Using a Microwave	Use a microwave to thaw foods that are to be cooked immediately following the thawing process. Microwave thawing actually begins the cooking process and must be followed by cooking the food item. Although thawing foods by a microwave is efficient, it is not recommended for large food items.
As part of the Cooking process	Frozen foods can also be thawed as part of the cooking process. Foods which work well with this method are frozen vegetables and ground meats. <ul style="list-style-type: none">• Allow more time than normal to cook and stir the food more often.• Check the final internal food temperature with a thermometer to determine that potentially harmful bacteria have been killed.
Under running Water	Another way to thaw frozen foods is under running water at 70 degrees F or less with water pressure sufficient to flush away loose particles. <ul style="list-style-type: none">• A clean and sanitized food sink separate from hand wash sinks is needed.• Avoid cross contamination from the water dripping off of the food or splashing onto other foods and preparation surfaces and utensils.

Date: _____

FOOD PREPARATION (continued)	y	N	y	N	y	N	y	N	Corrective Action/Date
• Frozen food is thawed under refrigeration or in cold running water and then cooked to the proper temperature.	<input type="radio"/>	_____							
• Thawed food is not refrozen.	<input type="radio"/>	_____							
• Preparation is planned so ingredients are kept out of the temperature danger zone.	<input type="radio"/>	_____							
• Food is tasted using the proper procedure.	<input type="radio"/>	_____							
• Procedures are in place to prevent cross-contamination.	<input type="radio"/>	_____							
• Food is handled with suitable utensils, such as single use gloves or tongs.	<input type="radio"/>	_____							
• Food is prepared in small batches to limit the time it is in the temperature danger zone.	<input type="radio"/>	_____							
• Clean reusable towels are used only for sanitizing equipment and surfaces and not for drying hands, utensils or floor.	<input type="radio"/>	_____							
• Food is cooked to the required safe internal temperature for the appropriate time.	<input type="radio"/>	_____							
• The internal temperature of food being cooked is monitored and documented.	<input type="radio"/>	_____							

HOT HOLDING	y	N	y	N	y	N	y	N	Corrective Action/Date
• Hot holding unit is clean.	<input type="radio"/>	_____							
• Food is heated to the required safe internal temperature before placing in hot holding. Hot holding units are not used to reheat potentially hazardous foods.	<input type="radio"/>	_____							
• Hot holding unit is pre-heated before hot food is placed in unit.	<input type="radio"/>	_____							
• Temperature of hot food being held is at or above 135 °F.	<input type="radio"/>	_____							
• Food is protected from contamination.	<input type="radio"/>	_____							

COLD HOLDING	Y	N	Y	N	Y	N	Y	N	Corrective Action/Date
• Temperature of cold food being held is at or below 41 °F.	<input type="radio"/>	_____							
• Food is protected from contamination.	<input type="radio"/>	_____							

Date:

REFRIGERATOR, FREEZER and MILK COOLER	Y	N	Y	N	Y	N	Y	N	Corrective Action/Date
• Food is stored 6 inches off the floor in walk-in coolers.	D	D	D	D	D	O	D	O	_____
• Refrigerator and freezer units are clean and organized.	O	D	D	D	D	D	D	D	_____
• Proper chilling procedures are used.	D	D	D	D	D	D	D	D	_____
• All food is properly wrapped, labeled and dated.	D	D	D	D	D	D	D	D	_____
• Air temperature of all refrigerators and freezers is monitored using accurate thermometers and documentation is on file.	D	D	D	D	D	D	D	D	_____

FOOD STORAGE and DRY STORAGE	Y	N	Y	N	Y	N	Y	N	Corrective Action/Date
• Temperature of dry storage area is between 50 °F and 70 °F.	D	D	D	D	D	D	D	D	_____
• All food and paper supplies are stored 6 to 8 inches off the floor.	D	D	D	D	D	D	D	D	_____
• All food is labeled with name and date received.	D	D	D	D	D	D	D	D	_____
• Open bags of food are stored in containers with tight fitting lids and labeled with common name.	D	D	D	D	D	D	D	D	_____
• The FIFO (First In, First Out) method of inventory management is used.	D	D	D	D	D	D	D	D	_____
• There are no dents on the seam, bulging or leaking canned goods.	D	D	D	D	D	D	D	D	_____
• All food surfaces are clean.	D	D	D	D	D	D	D	D	_____
• Chemicals are clearly labeled and stored away from food and food-related supplies.	D	D	D	D	D	D	D	D	_____
• There is a regular cleaning schedule for all food surfaces.	O	D	D	D	D	D	D	D	_____
• Food is stored in original container or a food grade container and is labeled with name and date received.	D	D	D	D	D	D	D	D	_____

CLEANING and SANITIZING	Y	N	Y	N	Y	N	Y	N	Corrective Action/Date
• Three-compartment sink is properly set up for ware washing.	D	D	D	D	D	D	D	D	_____
• Dishmachine is working properly (gauges and chemicals are at recommended levels).	D	D	D	D	D	D	D	D	_____
• Water is clean and free of grease and food particles.	D	D	D	D	D	D	D	D	_____
• Water temperatures are correct for wash and rinse.	D	D	D	D	D	D	D	D	_____
• If heat sanitizing, the utensils are allowed to remain immersed in 171 °F water for 30 seconds.	D	D	D	D	D	D	D	D	_____
• If using a chemical sanitizer, it is mixed correctly and a sanitizer strip is used to test chemical concentration.	D	D	D	D	D	D	D	D	_____
• All washed/sanitized items are allowed to air dry.	D	O	D	O	O	D	D	D	_____
• Wiping cloths are stored in sanitizing solution while in use.	D	D	D	O	D	O	O	D	_____

Date:

UTENSILS and EQUIPMENT	y	N	y	N	y	N	y	N	Corrective Action/Date
• All small equipment and utensils, including cutting boards and knives, are cleaned and sanitized between uses.	D	O	O	D	D	D	D	O	_____
• Work surfaces are cleaned and sanitized between uses.	D	D	O	D	D	D	D	D	_____
• Thermometers are cleaned and sanitized after each use.	D	D	D	D	D	D	D	D	_____
• Thermometers are calibrated on a regular basis.	D	D	O	D	D	O	O	D	_____
• Can opener is clean.	D	D	D	O	D	O	D	D	_____
• Drawers and racks are clean.	D	D	O	D	D	D	D	D	_____
• Clean utensils are handled in a manner to prevent contamination of areas that will be in direct contact with food or a person's mouth.	D	D	D	D	D	D	D	D	_____

LARGE EQUIPMENT	y	N	y	N	y	N	y	N	Corrective Action/Date
• Food slicer is broken down, cleaned and sanitized before and after every use.	D	D	D	D	D	D	D	D	_____
• Exhaust hood and filters are clean.	D	D	D	D	D	D	D	D	_____

GARBAGE STORAGE and DISPOSAL	y	N	y	N	y	N	y	N	Corrective Action/Date
• Outdoor garbage cans/dumpsters are clean, water-tight and kept covered.	D	D	D	D	D	D	D	D	_____
• Garbage cans are emptied as necessary.	D	D	D	D	D	D	D	D	_____
• Boxes and containers are removed from the site.	D	D	D	D	D	D	D	D	_____
• Loading dock and area around dumpster are clean and odor free.	D	D	D	D	D	O	D	D	_____
	D	D	D	D	D	D	D	D	_____

PEST CONTROL	y	N	y	N	y	N	y	N	Corrective Action/Date
• Outside doors have screens, are well-sealed and are equipped with a self-closing device.	D	D	O	D	D	D	O	D	_____
• No evidence of pests is present.	D	O	D	O	D	O	D	D	_____
• There is a regular schedule of pest control by a licensed pest control operator.	D	D	D	O	D	D	D	D	_____

Reviewer's Initials:

Additional Corrective Action: (Record the date, problem and corrective action required.)