

Proper Food Handling, Food Safety, and Sanitation Practices

(excerpted from the Michigan Food Law of 2000 as amended)

Handwashing

When to Wash: Food employees must wash their hands and exposed portions of the arms after touching bare human body parts, using the toilet room, handling animals, coughing/sneezing, using a handkerchief, using tobacco, eating/drinking, handling soiled equipment/utensils, as often as necessary to prevent cross-contamination, when switching between raw and ready-to-eat food, and after engaging in other activities that contaminate the hands.

How to Wash: Food employees shall clean their hands and exposed portions of the arms in a properly equipped handwashing facility by vigorously rubbing together the surfaces of the lathered hands and arms and thoroughly rinsing with clean water. Employees shall pay particular attention to the areas underneath the fingernails and between the fingers.

Hygiene

Food employees shall maintain a high degree of personal cleanliness and shall conform to good hygienic practices during all working periods. Food employees shall have clean outer garments and wear effective hair restraints. Smoking, eating, and drinking are not allowed by food employees in the food preparation and service areas. All non-working unauthorized persons must be restricted from the food preparation and service areas.

No Bare Hand Contact with Ready-To-Eat Food

Food employees may not contact exposed ready-to-eat food with their bare hands. Suitable utensils, such as deli paper, spatulas, tongs, dispensing equipment, or gloves shall be used.

Temperatures

Hot Holding: Potentially hazardous food must be maintained at 140° F or higher.

Cold Holding: Potentially hazardous food must be maintained at 41° F or below.

Cooking:

- 165° F for 15 seconds – poultry; stuffing containing fish, meat, or poultry; stuffed fish, meat, pasta or poultry.
- 155° F for 15 seconds – comminuted fish, meat, pooled raw eggs.
- 145° F for 15 seconds – raw shell eggs that are broken and prepared in response to a consumers order and for immediate service, fish, meat and pork.
- See section 3-401.11 (B) of the 1999 Food Code for cooking whole beef roasts, corned beef roasts, pork roasts, and cured pork roasts, such as ham.

Thawing: Potentially hazardous food shall be thawed either under refrigeration that maintains the food temperature at 41° F or less; completely submerged

under running water having a temperature of 70° F or below; or as part of a cooking process.

Cooling: Cooked potentially hazardous food shall be cooled from 140° F to 70° F within two hours or less; and from 70° F to 41° F within four hours or less.

Reheating for Hot Holding: Potentially hazardous food that is cooked, cooled, and reheated for hot holding shall be reheated so that all parts of the food reach a temperature of at least 165° F for 15 seconds within two hours.

Date Marking: Ready-to-eat potentially hazardous food that is held refrigerated for more than 24 hours must be clearly marked at the time of preparation to indicate the date by which the food shall be consumed which is seven calendar days or less from the day the food is prepared.

Food and Utensil Storage & Handling

Thermometers: A thermocouple or metal stem thermometer shall be provided to check internal temperatures of potentially hazardous hot and cold food items. Food temperature measuring devices shall be accurate to +/- 2° F, and should have a range of 0° F to 220° F.

Cross-Contamination: Food shall be protected from cross-contamination by separating raw animal foods from ready-to-eat foods during storage, preparation, holding, and display. Equipment and utensils (including knives, cutting boards, and food storage containers) must be thoroughly cleaned and sanitized after being used for raw animal foods and before being used for ready-to-eat food.

Cleaning

Warewashing: Either a commercial dishwasher or a 3-compartment sink set-up must be utilized to wash, rinse, and sanitize equipment and utensils coming into contact with foods. The minimum requirements for a utensil washing set-up to wash/rinse/sanitize should consist of three basins that are large enough for immersion of the utensils, a potable hot water supply, and an adequate disposal method for the wastewater. In-use equipment and utensils must be cleaned and sanitized at least every four hours.

Wiping Cloths: Wet wiping cloths that are in use for wiping food spills from food contact and nonfood contact surfaces of equipment shall be stored in a clean chlorine sanitizing solution at a concentration of 100 mg/l. Dry wiping cloths may be used to wipe food spills from tableware and carryout containers. All wiping cloths shall be free of food debris and visible soil, and shall be used for no other purpose.

Personal Belongings

Personal clothing and belongings must be stored at a designated place away from food, equipment, utensils, linens, and single service articles.



Bare Hand Contact with Ready-to-Eat Foods - Questions and Answers

These general guidelines for applying the *Rules and Regulations Governing Retail Food Establishments in the State of Colorado* are provided by the Colorado Department of Public Health and Environment, Division of Environmental Health & Sustainability. Additional information about the rules and regulations may be obtained by calling 303-692-3645, or visiting the Division's web page - www.cdphe.state.co.us/cp

Background

Although hand washing is critical for food safety, recent studies indicate that hand washing alone is not enough to prevent foodborne illnesses. The main reason for not touching ready-to-eat foods with bare hands is to prevent viruses and bacteria, which are present in your body, from contaminating the food. Viruses and bacteria are not visible to the naked eye, but may be present on your hands if you do not wash them thoroughly, particularly after using the bathroom. The *Colorado Retail Food Establishment Rules and Regulations* prohibits bare hand contact with ready-to-eat foods and requires good hand washing by food service workers.

How can we prevent contamination from being passed by the food we prepare or serve?

You can minimize contamination being passed to your customers by washing your hands, being very careful not to cross-contaminate food, not contacting ready-to-eat foods with bare hands, and by maintaining a high level of personal hygiene. Simply being aware of the potential dangers, and attempting to minimize them is a very large step in the right direction.

When am I required to wash my hands?

- When returning to the kitchen after using the toilet room.
- After coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating, or drinking.
- When switching between working with raw foods of animal origin and working with ready-to-eat foods.
- After touching bare human body parts other than clean hands and clean, exposed portions of arms.
- During food preparation as often as necessary to remove soil and contamination and to prevent cross-contamination when changing tasks.
- Before putting on single-use gloves for working with food, and between removing soiled gloves and putting on clean gloves.
- After handling soiled equipment or utensils.
- After caring for or handling any animals.
- After engaging in any activities that contaminate the hands.

What is good hand washing?

All employees involved with food preparation must wash their hands and exposed portions of their arms with soap and water. Thorough hand washing is done by vigorously rubbing together the surfaces of lathered hands and arms for at least 20 seconds followed by a thorough rinse with clean water. Use a single-service towel or hot air dryer to dry hands. No special soaps, such as antibacterial soap, are needed. Hand sanitizers may be used following appropriate hand washing, but not in place of hand washing.

What kinds of foods are considered ready-to-eat and may not be touched with bare hands?

- prepared fresh fruits and vegetables served raw
- salads and salad ingredients
- cold meats and sandwiches
- shredded cheese
- bread, toast, rolls and baked goods
- garnishes such as lettuce, parsley, lemon wedges, potato chips or pickles
- fruit or vegetables for mixed drinks during preparation activities
- ice
- any food that will not be thoroughly cooked or reheated after it is prepared

Bare hand contact is allowed for foods, which will be cooked, such as pizza toppings, raw meats, and ingredients for recipes prior to cooking.

How can I prepare or serve ready-to-eat food while avoiding contact with my bare hands?

You may use any of the following utensils to prepare or serve foods without bare hand contact:

- tongs
- forks and spoons
- deli paper
- disposable gloves
- waxed paper
- scoops
- spatulas

Am I required to wear disposable sanitary gloves?

No. The regulation does not require gloves to be worn, but does require that ready-to-eat foods be prepared and served without bare hand contact. Wearing disposable sanitary gloves is one of several acceptable ways to comply with the regulation. Remember that gloves are just an extension of your hands. If the gloves become soiled, they can pass contamination just as easily as unclean hands.

When do I have to replace or change gloves?

Always change gloves if the gloves are ripped, torn, or contaminated. Contamination can occur after using the toilet room, smoking, coughing, sneezing, and preparing raw foods. You should always remove your gloves before you leave your station, and then wash your hands. Food worker hands must be washed and dried thoroughly before putting on new gloves.

What is the "right way" to change gloves?

Remove and throw away the old gloves. Thoroughly wash and dry your hands. Put on a clean fresh pair of gloves without touching anything else.

Is a short order cook required to wear gloves?

The short order cook may not touch ready-to-eat foods with bare hands. Disposable gloves are one possible way to prevent bare hand contact with ready-to-eat foods. Another way is to use utensils such as forks, tongs, spatulas, or splitting tasks between more than one individual where possible.

Are there concerns about use of gloves and latex allergy?

Food establishment employees who repeatedly use latex gloves may be at risk of developing sensitivity to latex. Allergens from the gloves could be transferred to the food, and may cause a reaction in allergic individuals. Good substitutes for latex gloves are available and include vinyl, nitrile, polyvinyl, chloroprene, or polyethylene gloves, deli tissues and tongs.

Are there alternatives other than using utensils or gloves?

Yes. Some establishments have obtained an approved Bare Hand Contact Exemption, which allows them to touch ready-to-eat foods with bare hands. The parameters of this exemption typically include, but are not limited to frequent hand washing and the maintenance of a hand washing record. Failure to comply with the parameters of an exemption could result in a revocation of this exemption by the regulatory agency.

What should I do with a ready-to-eat food item if it was touched with bare hands?

You can either heat the food thoroughly to the temperature required for cooking or reheating, or discard the food, if it was touched with bare hands.

Where can I learn more about hand washing and bare hand contact with ready-to-eat foods?

Your local health department can answer questions or give you more information about hand washing, bare hand contact with ready-to-eat foods, and additional important information on preventing foodborne illnesses.

Guidelines For Proper Glove Use in Food Establishments: “No Bare Hands”

Contamination of food by the hands of food handlers is an important cause of foodborne illness outbreaks. For this reason, many food establishment operators (and health departments) have encouraged or required kitchen staff to wear gloves while handling food. There currently are no requirements for glove use in food service establishments, but, a “no bare hands” policy is recommended for handling ready-to-eat foods (e.g. sandwiches, salads). Gloves and utensils (such as tongs) can be used to minimize bare hand contact of food. If gloves are used incorrectly, however, the risk of contamination by a gloved hand is the same as for a bare hand. If the type of glove is appropriate, proper handwashing is practiced, and the gloves are changed frequently, gloves can provide an effective barrier between the hands of food handlers and the foods they handle.

The following guidelines are recommended for glove use in food service establishments:

Type of Gloves

1. Avoid the use of latex gloves in food establishments:
 - ◆ Food handlers may develop latex allergies through prolonged use of latex gloves (approximately 10% of the population is thought to be susceptible to such allergies).
 - ◆ Trace amounts of latex from gloves may be introduced into food, which in rare circumstances, may cause an allergic reaction in consumers sensitized to latex.
 - ◆ The following materials are suitable alternatives to latex:
 - ◆ polyvinyl
 - ◆ nitrile
 - ◆ chloroprene
 - ◆ Polyethylene
2. Make gloves of different sizes available, to ensure proper fit and comfort.
3. Use high-quality durable gloves to minimize leaking and tearing.



Proper Use of Gloves



1. Hands must be washed and dried thoroughly:
 - ◆ Before wearing gloves
 - ◆ When changing to a new pair of gloves
 - ◆ After removing the gloves
2. A new pair of gloves must be worn:
 - ◆ When changing tasks (e.g. when moving to a new work station, after handling raw meats, before handling ready-to-eat foods such as sandwiches, after cleaning duties, etc.).
 - ◆ After covering mouth during sneezing or coughing, blowing nose, or touching hair (again, hands must be washed after gloves have been removed).
 - ◆ As frequently as possible. A pair of gloves should not be worn for more than 4 hours. Prolonged use of a single pair of gloves can result in excess perspiration on hands, which provides ideal conditions for bacterial growth on the skin. Gloves are also more likely to leak or tear if worn for extended periods.
3. Disposable gloves should only be used once.
4. Durable re-usable gloves must be washed and sanitized between tasks and stored carefully after removal to prevent contamination.
5. Gloves should always be worn by employees:
 - ◆ Who have cuts, sores or rashes on hands
 - ◆ Who wear orthopedic support devices on the hands that cannot be adequately cleaned, such as casts and braces
 - ◆ Who wear artificial nails or fingernail polish

For more information, please contact your nearest Environmental Public Health office.

Edmonton Main Office
Calgary Main Office
Lethbridge Main Office

(780) 735-1800
(403) 943-2295
(403) 388-6689

Grande Prairie Main Office
Red Deer Main Office
www.albertahealthservices.ca/eph.asp

(780) 513-7517
(403) 356-6366

4EPHF-10-028
Created: Feb/04
Revised: May/08
Updated: Oct/10

Tips to Avoid Bare Hand Contact with Food

BY DENNIS KEITH -[LEAVE A COMMENT](#)



You won't find a more debated or controversial topic between food safety inspectors and the restaurant industry than bare hand contact with ready-to-eat foods. According to the FDA, you can't do it. This results in many chefs having to wear gloves. As an inspector myself, I've heard all the arguments:

"I don't have to wear gloves because I wash my hands so often."

"I can't prepare the food properly with gloves on."

"If I can't feel the fish while cutting it, then I'll cut my hand!"

"The plastic in the gloves changes the taste of the food."

For the most part, none of these arguments get very far during an inspection. The food industry either needs to provide better ways to prevent bare hand contact with food or train staff better to prevent it, because it's critically important.

What's the Rule for No Bare Hand Contact?

“Except when washing fruits and vegetables, food employees shall not contact exposed ready-to-eat food with their bare hands and shall use suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment.” (2009 FDA Food Code)

As you can see, there are other alternatives to gloves, but in many cases wearing gloves is the only option.

Bare Hand Contact = Viruses

There is one very important reason the no bare hand contact rule was put in place—viruses. Recently, I had a discussion with a fellow inspector about this topic and he didn't seem to know why a rigorous hand washing policy wasn't good enough. Good hand washing is no defense against persistent viruses. One resilient virus in particular is norovirus. It has quickly jumped to the front as the most prolific foodborne illness today. It is highly contagious. Sick employees can shed the virus through their hands even after they wash them.

According to the CDC, “norovirus is recognized as the leading cause of foodborne-disease outbreaks in the United States. Nearly half of all illnesses associated with foodborne-disease outbreaks reported to CDC during 2006–2007 were attributed to norovirus.” Norovirus can also have a two-day incubation period, making it possible to have an infected food handler spreading the disease without even knowing it, if he or she is directly handling food with infected hands.

Learn more about norovirus on these links:

[We Don't Cover Norovirus Enough](#)

[Surveillance for Norovirus Outbreaks](#)

Best Practices to Avoid Bare Hand Contact

Now that we know why the no bare hand contact rule is important, how can we best manage it? Gloves are expensive, cumbersome, high maintenance, and very uncomfortable. It's understandable why people in the food industry don't want to wear them. What I tell my clients is to find other ways to prepare food without using hands. Remember, the FDA's rule lists many other options to gloves: deli tissue, tongs, spatulas, etc. Here are some solutions in use today:

- Putting lemons/limes on drinks: Use toothpicks
- Cutting bread: Stab bread with a large fork and then slice
- Preparing toast: Use deli tissue
- Working on the cook line: Use tongs and spatulas as much as possible

Once these practices are in place, make sure you thoroughly train employees on them. This should be part of a larger food safety training program in your restaurant. It's very important to change the bad habits of the past and keep moving forward with the best practices you have implemented. It's a battle every day, but if you don't stay focused on making proper changes, your staff will always revert back to bad habits of the past and therefore put your business at risk.

The FDA's rule on bare hand contact will always pose a problem for the food industry. It's important that the industry continues to find innovative ways to cheaply and efficiently control it. If it can't, norovirus will continue to be the number one foodborne illness, costing the food industry millions every year. But don't take my word for it, ask Trostel's Greenbriar Restaurant and Bar in Johnston, Iowa: [Iowa Couple Sues Restaurant After Rehearsal Dinner Sickens Wedding Party](#)

For further help, please feel free to contact me with any food safety needs: dennis@resprofsp.com.

For more information on preventing bare hand contact, the Colorado Department of Public Health and Environment has a good resource: