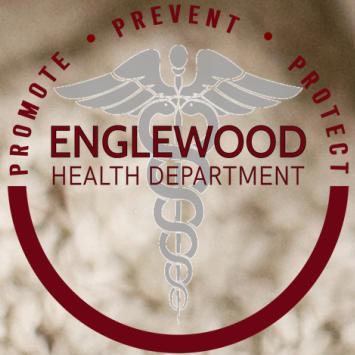


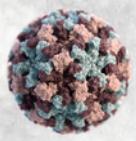
FALL/WINTER 2025 EDITION

# FOOD FOR *Thought*



# Norovirus: Facts for Food Workers

**Norovirus spreads easily and can make you very sick with diarrhea, vomiting, and stomach pain. All food workers should know how to prevent the spread of norovirus.**



## Foods contaminated with norovirus can make people sick.

Norovirus is the leading cause of foodborne illness outbreaks in the United States. Norovirus causes about half of all outbreaks of food-related illness. Most reported norovirus outbreaks are caused by people who touch or prepare food when they are sick, or sometimes by food that comes from contaminated water. Because the virus is very tiny and spreads easily, it only takes a very small amount of virus to contaminate food and make someone sick.

Food can get contaminated with norovirus when—

Infected people who have feces (poop) or vomit on their hands touch the food.

Food is placed on counters or surfaces that have tiny drops of feces (poop) or vomit on them.

Tiny drops of vomit from an infected person spray through the air and land on the food or surfaces, like countertops.

Feces (poop) or vomit is in areas where food is grown or harvested.

## Food workers with norovirus illness can spread the virus to others.

People who are infected with norovirus can shed billions of norovirus particles in their feces (poop) or vomit. You are most contagious—

When you feel sick with norovirus, and

During the first few days after you feel better.

If you work with food when you have norovirus, you can easily contaminate the food and drinks you touch. People who have the contaminated food or drinks you touched can also get norovirus and become sick.

**Norovirus causes about half of all outbreaks of food-related illness.**

Any food served raw or handled after being cooked can get contaminated with norovirus.



# 4 Tips to Prevent Norovirus from Spreading

## 1. When you are sick, do not prepare, serve, or touch food for others

Foodworkers should stay home when sick and for at least 48 hours after symptoms stop. This also applies to sick workers in schools, daycares, healthcare facilities, and other places where they may expose people to norovirus.

Food workers should inform managers if they have any symptoms of norovirus illness or were recently sick. Even when returning to work, it is especially important that food workers continue to take precautions like frequent handwashing.

For more information, see the FDA Food Code: (<http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/>)

## 2. Practice proper hand hygiene

Always wash hands carefully with soap and water, especially—

After using the toilet and

Before eating, preparing, or handling food.

Alcohol-based hand sanitizers can be used in addition to hand washing. However, they should not be used as a substitute for washing with soap and water. In addition, food workers should avoid touching food, especially ready-to-eat food, with bare hands, and use gloves or tongs instead. Hands should still be washed before and after use of gloves in order to prevent cross-contamination.

## 3. Wash fruits and vegetables and cook seafood well

Carefully wash fruits and vegetables before preparing and eating them.

Cook oysters and other shellfish thoroughly before eating.

Thorough cooking is important because noroviruses can survive temperatures as high as 145°F. Quick steaming processes that are often used for cooking shellfish won't kill the virus.

Food that might be contaminated with norovirus should be thrown out.

## 4. Clean and disinfect contaminated surfaces

After throwing up or having diarrhea, immediately clean and disinfect contaminated surfaces like countertops. Use a chlorine bleach solution with a concentration of 1000 to 5000 ppm (5 to 25 tablespoons of household bleach [5.25%] per gallon of water) or other disinfectant registered as effective against norovirus by the Environmental Protection Agency (EPA). See EPA's list of registered disinfectants effective against norovirus: (<https://www.epa.gov/pesticide-registration/list-g-antimicrobial-products-registered-epa-claims-against-norovirus-feline>)

## What is the Right Way to Wash Your Hands?

1. Wet your hands with clean, running water (warm or cold) and apply soap.
2. Rub your hands together to make a lather and scrub them well; be sure to scrub the backs of your hands, between your fingers, and under your nails.
3. Continue rubbing your hands for at least 20 seconds. Need a timer? Hum the "ABC" song from beginning to end twice.
4. Rinse your hands well under clean, running water.
5. Dry your hands using a clean towel or air dry them.
6. Use a paper towel or your elbow to open the bathroom door.

See CDC's handwashing website: ([www.cdc.gov/handwashing/](http://www.cdc.gov/handwashing/))



Visit CDC's norovirus website at  
[www.cdc.gov/norovirus](http://www.cdc.gov/norovirus) for more information.

# Keep Commercial Deli Slicers Safe

## Did You Know...?

Deli slicers commonly used in retail and foodservice establishments to slice meats, cheeses and produce may become difficult or impossible to properly clean and sanitize after a period of use. Failure to adequately clean and sanitize all surfaces of a deli slicer can contaminate food and cause illnesses or death.

- Recent outbreaks of foodborne illness have been associated with the build-up of food soils and disease-causing microorganisms on areas of deli slicers that are difficult to clean and sanitize.
- Outbreaks of serious illness and hospitalizations have resulted.
- Many seams between the connected parts and components of a typical deli slicer are sealed with sealants and gaskets.

These seams can become worn, degraded or removed as a result of the heavy use and cleaning process that deli slicers undergo. As these seals and gaskets become degraded, spaces can be created that can trap debris and moisture, which can lead to areas that may not be able to be adequately cleaned and sanitized under normal cleaning conditions.

## Deli Slicer Problem Areas That Are Hard To Clean

### ARROWS POINT TO KEY AREAS OF CONCERN

Carefully monitor these areas for any cracks, broken, missing or unattached parts



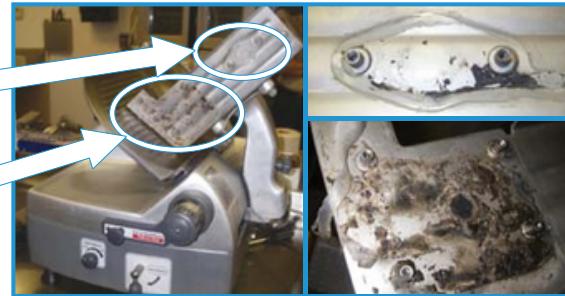
Food soil accumulation at the ring guard mount.



Food soil accumulation on the inside of the blade guard at the white plastic piece.



Slicer Handle



Surfaces under the slicer handle can accumulate food soil and debris and require monitoring to prevent build-up.

## What YOU Can Do

**CLEAN and SANITIZE deli slicers per manufacturer's instructions at least once every four hours in order to prevent the growth of disease-causing bacteria.**

- Keep the instructions posted near the slicer location and follow them closely.
- Simply wiping down a slicer to remove visible debris is not a substitute for thoroughly cleaning and sanitizing the equipment.

**Routinely examine the condition of seams, seals and gaskets to confirm integrity of these seals while the slicer is assembled and before breaking down for cleaning and sanitizing.**

- Look in hard-to-reach areas for food and liquid accumulations.

**If a seal or gasket is broken, missing, unattached, defective or otherwise not performing its function, remove the slicer from service immediately and contact the slicer manufacturer for repair or replacement.**

- All repairs should be performed by the manufacturer's authorized service representative or using repair kits available from or provided by the original manufacturer.

**Have the slicer professionally serviced according to the manufacturer's recommended schedule.**

- Ensure that the servicing includes examination of all seams and the routine replacement of seals and gaskets.
- Proper servicing may require that components be removed and then reattached with the proper reapplication of sealants or gaskets.

## Food Allergies: What You Need to Know



**Millions of Americans have food allergies and may experience adverse reactions to products that have food allergens. Most reactions cause mild symptoms, but some are severe and may even be life-threatening.**

Although new treatments are being developed, there is no cure for food allergies. Medical diagnosis to find out which foods cause an individual to have an allergic reaction and strictly avoiding those foods are important ways to prevent serious adverse health effects.

### What Are the Major Food Allergens?

While many different foods can cause allergic reactions, the [Food Allergen Labeling and Consumer Protection Act of 2004 \(FALCPA\)](#) identified eight foods as major food allergens: milk, eggs, fish, Crustacean shellfish, tree nuts, peanuts, wheat, and soybeans.

On April 23, 2021, the [Food Allergy Safety, Treatment, Education, and Research \(FASTER\) Act](#) was signed into law, declaring sesame as the 9th major food allergen recognized by the United States. The change was effective on January 1, 2023. Even though the requirement that sesame be listed on the label as an allergen is in effect as of January 1, 2023, you still may find food products for sale that don't list sesame as an allergen on the label. Read more about the transition phase at [Allergic to Sesame? Food Labels Now Must List Sesame as an allergen.](#)

1. Milk
2. Eggs
3. Fish (e.g., bass, flounder, cod)
4. Crustacean shellfish (e.g., crab, lobster, shrimp)
5. Tree nuts (e.g., almonds, walnuts, pecans)
6. Peanuts
7. Wheat
8. Soybeans
9. Sesame

### Allergen Labeling

The FDA enforces FALCPA in the labeling of foods the agency regulates, which include all foods except poultry, most meats, certain egg products, and most alcoholic beverages (all of which are regulated by other Federal agencies). FALCPA requires that food labels clearly identify the food source names of any ingredients that are one of the nine major food allergens or contain protein derived from a major food allergen. Proper labeling of foods helps allergic consumers identify foods or ingredients that they should avoid.



## How Major Food Allergens Are Listed

FALCPA requires that food labels identify the food source names of all major food allergens used to make the food. This requirement is met if the common or usual name of an ingredient (e.g., buttermilk) that is a major food allergen already identifies that allergen's food source name (i.e., milk). Otherwise, the allergen's food source name must be declared at least once on the food label in one of two ways:

**1. In parentheses following the name of the ingredient in the ingredient list.**

Examples: "lecithin (soy)," "flour (wheat)," and "whey (milk)"

— OR —

**2. Immediately after or next to the list of ingredients in a "contains" statement.**

Example: "Contains Wheat, Milk, and Soy."

## Know the Symptoms of Food Allergies

If you are allergic to a food you have eaten, you may experience a variety of symptoms. These symptoms are not always present or the same for every person or reaction and can vary depending on a number of factors, including the amount of food allergen eaten.

If you are allergic to a food that you have eaten, symptoms may appear from within a few minutes to a few hours.

Symptoms of food allergies (allergic reactions), can include:

- Hives
- Flushed skin or rash
- Tingling or itchy sensation in the mouth
- Face, tongue, or lip swelling
- Vomiting and/or diarrhea
- Abdominal cramps
- Coughing or wheezing
- Dizziness and/or lightheadedness
- Swelling of the throat and vocal cords
- Difficulty breathing
- Loss of consciousness



## Food Allergies Can Be Life-Threatening

While most symptoms from food allergies are mild and limited to skin or digestive discomfort, some may progress to a severe, life-threatening allergic reaction called anaphylaxis.

This can lead to:

- constricted airways in the lungs
- severe lowering of blood pressure and shock  
("anaphylactic shock")
- suffocation by swelling of the throat and larynx

If you have a known food allergy and start having symptoms of an allergic reaction:

- Stop eating the food immediately
- Evaluate the need for emergency treatment (such as epinephrine)
- Seek medical attention

**Symptoms of anaphylaxis may start out as relatively mild but, if not treated promptly, symptoms can become life-threatening in a short amount of time.**

**Recognizing early symptoms of anaphylaxis and prompt injection of the drug epinephrine and other medical care or intervention can help prevent life-threatening consequences.**

**It is important to understand that a mild allergic reaction does not always mean the allergy is mild. Any allergic reaction has potential to lead to anaphylaxis. Allergic individuals are taught to always monitor symptoms and seek medical care if needed when symptoms occur.**

## What to Do If Symptoms Occur

**The appearance of symptoms after eating certain foods may be a sign of a food allergy. The food(s) that caused these symptoms should be avoided, and the affected person should contact a health care provider for appropriate testing and evaluation.**

If you or a loved one has food allergies, use these 4 tips to help reduce your risk of getting sick:

1. **Always read food labels.**
2. **Avoid foods that you are allergic to.**
3. **Learn to recognize the early symptoms of an allergic reaction, in case of accidental ingestion.**
4. **Know what to do in case an allergic reaction occurs. Plan to have ready access to the appropriate treatment measures and medical care.**



## Reporting Adverse Reactions and Labeling Concerns

**If you or a family member has had an allergic reaction after eating an FDA-regulated food or food product with unclear labeling or a possible allergen, discuss this with your health care provider. Keep any food packages because they may contain important information. You may want to contact the manufacturer.**

**Also, report the suspected reaction or labeling concerns to the FDA in one of these ways:**

- **Consumers and manufacturers can submit reports detailing product reactions or other complaints to an [FDA Consumer Complaint Coordinator](#) for the state where the food was purchased,**
- **Call FDA at 1-888-SAFEFOOD, or**
- **Submit a report using FDA's [MedWatch Online reporting form](#) for consumers.**

**Reports submitted to FDA should include as much information as possible:**

- **Who is reporting the incident and who was affected? Please provide names, addresses, and phone numbers.**
- **The name and address of the place where the product was purchased.**
- **A clear description of the reaction, including:**
  - **Date the reaction occurred.**
  - **All symptoms experienced.**

# FOOD FACTS

- **How long after you ate or drank the product that the reaction occurred.**
- **Medications used to treat symptoms.**
- **Whether the reaction required further medical care, and if so, what kind. Please provide contact information for the doctor or hospital.**
- **A complete description of the product, including:**
  - **Date of purchase.**
  - **Any codes or identifying marks on the label or container, such as lot number, expiration date, and UPC code.**
  - **Photos of the product, label, ingredient statement, and lot code.**

**Consumer reports of adverse events help FDA identify problem products and better protect all consumers.**

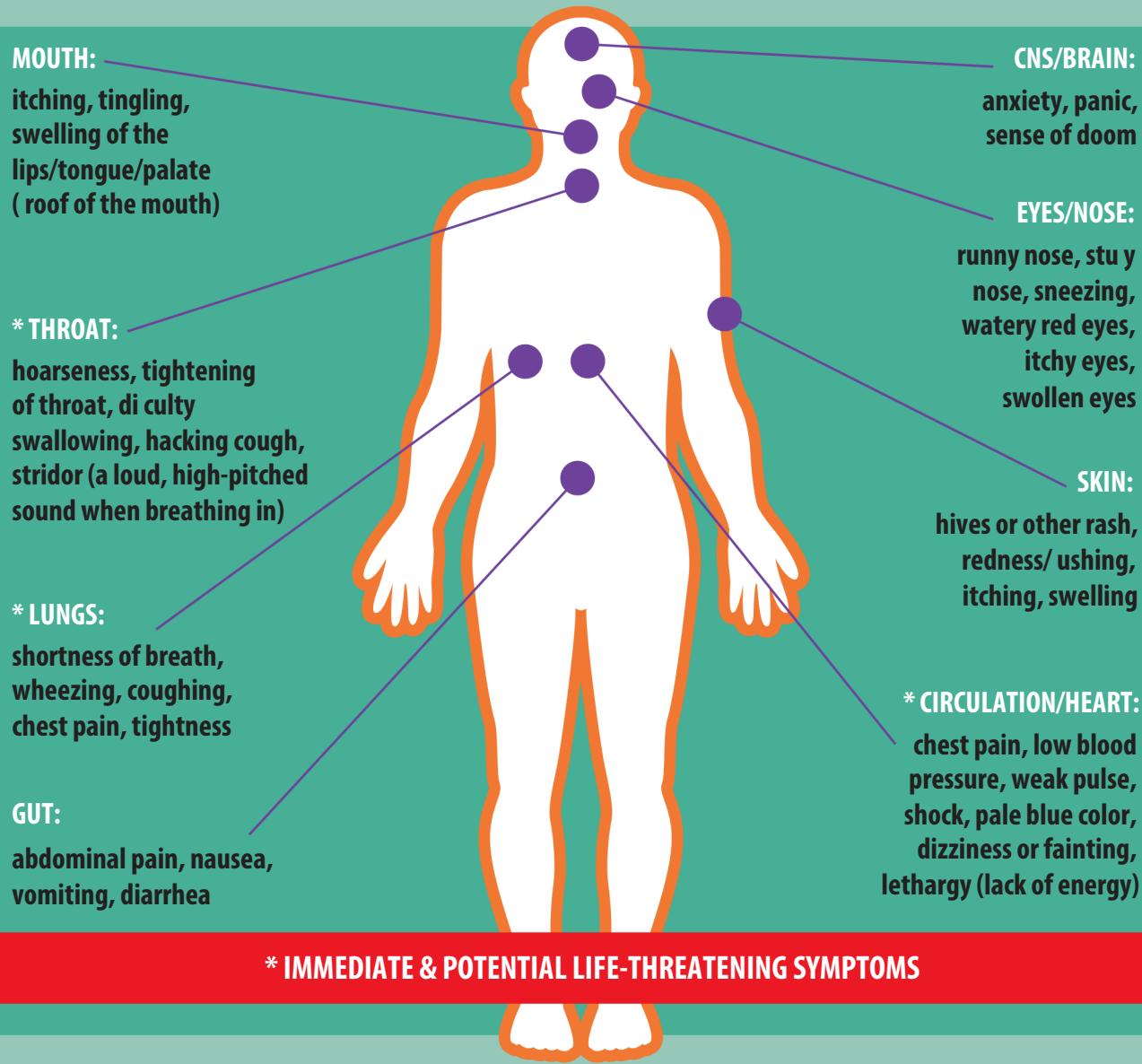
**For more information on food allergies, visit:**

<https://www.fda.gov/food/food-labeling-nutrition/food-allergies>

# SIGNS AND SYMPTOMS OF ANAPHYLAXIS

Anaphylaxis (an-a- LAK-sis) is a serious allergic reaction that comes on quickly and has the potential to become life-threatening. The most common anaphylactic reactions are to foods, venom, medications, and latex.

Anaphylaxis signs and symptoms that may occur alone (\*) or in any combination after exposure to an allergen include:



Consult with a board-certified allergist for an accurate diagnosis and management plan.

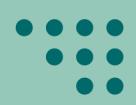
Although the majority of individuals experiencing anaphylaxis have skin symptoms, some of the most severe cases have no rash, hives, swelling

EPINEPHRINE is the first-line of treatment for anaphylaxis

Antihistamines, inhalers, & other treatments should only be used as secondary treatment

ALWAYS CARRY TWO (2) epinephrine products at all times

When you, or someone you know, begin to experience symptoms, CALL 9-1-1 IMMEDIATELY!

 **FAACT**  
Food Allergy & Anaphylaxis  
Connection Team  
AWARENESS • ADVOCACY • EDUCATION

[FoodAllergyAwareness.org](http://FoodAllergyAwareness.org)

***The Voice of Food  
Allergy Awareness***



NATIONAL  
**FOOD  
SAFETY**  
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# COMPREHENSIVE CHART

# Food Safety Basics



## COOKING TEMPERATURES

### Required Minimum Internal Cooking Temperatures

These temperatures are based on guidance from the FDA Food Code:  
[fda.gov/food/retail-food-protection/fda-food-code](https://fda.gov/food/retail-food-protection/fda-food-code)

INGREDIENT	DETAILS	MIN. INTERNAL COOKING TEMP.	TIMING
Poultry	Including whole or ground chicken, turkey, or duck	165 F (74 C)	<1 second (instantaneous)
Stuffing	Made with fish, meat, or poultry	165°F (74°C)	<1 second (instantaneous)
Stuffed meat	Seafood, poultry, or pasta	165°F (74°C)	<1 second (instantaneous)
Dishes that include previously cooked TCS ingredients	Including casseroles, quiches, and meat pies	165°F (74°C)	<1 second (instantaneous)
Ground meat	Including beef, pork, and other meat	155°F (68°C)	17 seconds
Ground seafood		155°F (68°C)	17 seconds
Seafood	Including fish, shellfish, and crustaceans	145°F (63°C)	15 seconds
Pork, beef, veal, lamb		Steaks or chops: 145°F (63°C) Roasts: 145°F (63°C)	Steaks or chops: 15 seconds Roasts: 4 minutes
Shell eggs	For immediate service	145°F (63°C)	15 seconds
Fruits, vegetables, grains	Including rice, pasta) and legumes (e.g., beans, refried beans) that will be hot held for service	For hot holding: 155°F (68°C) 135°F (57°C)	17 seconds No minimum time
Commercially processed and packaged ready-to-eat food	Including pre-cooked hams	135°F (57°C)	No minimum time

## Beef, Lamb, Pork and Veal Roasting Charts



# Meat and Poultry Roasting

Charts below list recommended cook times, but you must always use a food thermometer to assure that meat and poultry have reached a safe minimum internal temperature. When roasting meat and poultry, set the oven temperature to 325 °F or higher.

These are the guidelines provided by the Department of Health and Human Services  
[foodsafety.gov/food-safety-charts/meat-poultry-charts](https://foodsafety.gov/food-safety-charts/meat-poultry-charts)



### Beef

Type	Rib	Weight	Oven °F	Timing
roast, bone-in		4 to 6 lbs.	325	23 to 25 min/lb.
Rib roast, boneless		4 to 6 lbs.	425	28 to 33 min/lb.
Round or rump roast		2 ½ to 4 lbs.	325	30 to 35 min/lb.
Tenderloin roast, whole		4 to 6 lbs.	325	45 to 60 minutes total



### Pork

Type	Weight	Oven °F	Timing
Loin roast, bone-in or boneless	2 to 5 lbs.	350	20 min/lb.
Crown roast	10 lbs.	350	12 min/lb.
Tenderloin	½ to 1 ½ lbs.	425-450	20 to 27 minutes total
Boston butt	3 to 6 lbs.	350	45 min./lb.
Ribs	2 to 4 lbs.	350	1 ½ to 2 hours (or until fork tender)



### Lamb

Type	Weight	Oven °F	Timing
Leg, bone-in.	5 to 7 lbs	325	20 to 25 min/lb.
Leg, bone-in	7 to 9 lbs.	325	10 to 15 min/lb.
Leg, boneless, rolled	4 to 7 lbs.	325	25 to 30 min/lb.
Shoulder roast	3 to 4 lbs.	325	30 to 35 min/lb.



### Veal

Type	Weight	Oven °F	Timing
Rib roast	4 to 5 lbs.	325	25 to 27 min/lb.
Loin	3 to 4 lbs.	325	34 to 36 min/lb.



## Ham Cooking Chart (Set oven temperature to 325 °F)

### COUNTRY HAM

Type	Oven °F
Whole or half	<ol style="list-style-type: none"><li>1. Soak 4 to 12 hours in refrigerator.</li><li>2. Cover with water, then boil 20 to 25 minutes per pound.</li><li>3. Drain the ham and cook at 400 °F for 15 minutes to brown.</li></ol>

### SMOKED HAM, COOK BEFORE EATING

Type	Weight	Timing
Whole, bone-in	10 to 14 lbs.	18 to 20 min/lb.
Half, bone-in	5 to 7 lbs. 3	22 to 25 min/lb.
Shank or butt portion, bone-in	to 4 lbs.	35 to 40 min/lb.
Arm picnic shoulder, boneless	5 to 8 lbs. 2	30 to 35 min/lb.
Shoulder roll (butt), boneless	to 4 lbs.	35 to 40 min/lb.

### SMOKED HAM, COOKED

Type	Weight	Timing
Whole, bone-in	10 to 14 lbs.	15 to 18 min/lb.
Half, bone-in	5 to 7 lbs. 5	18 to 24 min/lb.
Arm picnic shoulder, boneless	to 8 lbs.	25 to 30 min/lb.
Canned ham, boneless	3 to 10 lbs.	15 to 20 min/lb.
Vacuum packed, boneless	6 to 12 lbs.	10 to 15 min/lb.
Spiral cut, whole or half	7 to 9 lbs.	10 to 18 min/lb.





## Poultry Roasting Chart

(For unstuffed poultry. Add 15 to 30 minutes for stuffed birds.)

Type	Size	Oven °F	Timing
Chicken, whole	3 to 4 lbs.	350	2 to 2 ¼ hours
Chicken, breast halves, bone-in	5 to 7 lbs.	350	2 to 2 ¼ hours
Chicken, breast halves, boneless	6 to 8 oz.	350	30 to 40 minutes 20 to 30
Capon, whole	4 oz.	350	minutes 2 to 3 hours 50 to
Cornish hen, whole	18 to 24 oz.	350	60 minutes 30 to
Duck, whole (do not stuff)	4 to 6 lbs.	350	35 min/lb 1 ¼ to 1 ½ hours
Duck, legs or thighs		325	2 ½ to 3 hours 2 hours
Young goose, whole	8 to 12 lbs.	325	
Young goose, pieces or cut up		325	



## Turkey Roasting Chart

(Set oven temperature to 325 °F.)

Turkey Size	Unstuffed	Stuffed	Not usually
4 to 6 lbs. (breast)	1 ½ to 2 ¼ hours	applicable	3 to 3 ½
6 to 8 lbs. (breast)	2 ¼ to 3 ¼ hours	hours	3 to 3 ½ hours 3
8 to 12 lbs.	2 ¾ to 3 hours	½ to 4 hours	4 to 4 ¼
12 to 14 lbs.	3 to 3 ¾ hours	hours	4 ¼ to 4 ¾
14 to 18 lbs.	3 ¾ to 4 ¼ hours	hours	4 ¾ to 5 ¼
18 to 20 lbs.	4 ¼ to 4 ½ hours	hours	
20 to 24 lbs.	4 ½ to 5 hours		

# Food Establishment Owners/Managers are you interested in having your food handlers achieve food handler certification?

Please contact the Health Department to arrange for a class to be held at either the Health Department or at your food establishment. If you register eight food handlers or more, a free skill demonstration can be provided. Contact Priscilla Lewis, Senior Registered Environmental Health Specialist or Aisha Osmann, Registered Environmental Health Specialist at 201-568-3450 Ext 510 or 517.

**WE ARE HERE TO ASSIST YOU!**

