

**U.S. Department of Agriculture  
Food Safety and Inspection Service**

**Food Safety for Transplant Recipients**

*A need-to-know guide for bone marrow and solid organ transplant recipients*

Food safety is important for everyone — but it's especially important for you. That's why the U.S. Department of Agriculture's Food Safety and Inspection Service has prepared this booklet. It's designed to provide practical guidance on how to reduce your risk of foodborne illness. In addition to this practical guidance, we encourage you to check with your physician or health care provider to identify foods and other products that you should avoid. You have a special need for this important information . . . so read on!

**What's Inside:**

Food Safety: It's Especially Important for You	3
Major Pathogens that Cause Foodborne Illness	4-6
Eating at Home: Making Wise Food Choices	7
Common Foods: Select the Lower Risk Options	8-9
Taking Care: Handling and Preparing Food Safely	10-12
Cold Storage Chart	13
In the Know: Becoming a Better Shopper	14
Food Product Dating	15
Transporting Your Groceries	15
Being Smart When Eating Out	16
Tips for Transporting Food	17
Foodborne Illness: Know the Symptoms	18
Foodborne Illness Action Plan	19
For More Information on Food Safety	20
Additional Food Safety Resources	21
Be Food Safe Clip-Out Information Cards	22

**Foodborne Illness in the United States**

When certain disease-causing bacteria or pathogens contaminate food, they can cause foodborne illness. Foodborne illness, often called *food poisoning*, is an illness that comes from a food you eat.

- The food supply in the United States is among the safest in the world— but it can still be a source of infection for all persons.
- According to the Centers for Disease Control and Prevention, 76 million persons get sick, 325,000 are hospitalized, and 5,000 die from foodborne infection and illness in the United States each year. Many of these people are very young, very old, or have weakened immune systems and may not be able to fight infection normally.

Since foodborne illness can be serious — or even fatal — it is important for you to know and practice safe food handling behaviors to help reduce your risk of getting sick from contaminated food.

**Food Safety: *It's Especially Important for You***

As a transplant recipient, you are probably familiar with the topic of transplant rejection. It's the body's natural reaction or immune system's response to "foreign invasion."

- A properly functioning immune system will try to reject or destroy your new solid organ and/or bone marrow transplant – in the same way that your immune system works to clear infection from your body.
- Because of this natural rejection possibility, it's common for transplant recipients to take medications to keep rejection from happening. These drugs are called immunosuppressive medications because they suppress your immune system to keep it from attacking, or rejecting, your transplanted organ or bone marrow. Over the past few decades, substantial progress has been made in the development of these drugs that help prevent you from experiencing a transplant rejection.
- Immunosuppressive medications are important, as they can protect your transplanted solid organ and/or bone marrow. But a side-effect of these immunosuppressants is that they leave you more susceptible to developing infections – like those that can be brought on by disease-causing bacteria and other pathogens that cause foodborne illness.
- Because you are a transplant recipient, you are more likely to have a lengthier illness, undergo hospitalization, or even die should you contract a foodborne illness.
- To avoid contracting a foodborne illness, you must be especially vigilant when handling, preparing, and consuming foods.

*Make safe food handling a lifelong commitment to minimize your risk of foodborne illness.*

## Major Pathogens that Cause Foodborne Illness

<b><i>Campylobacter jejuni</i></b>	
<b>Associated Foods</b> <ul style="list-style-type: none"> <li>Contaminated water</li> <li>Unpasteurized milk</li> <li>Raw or undercooked meat, poultry, or shellfish</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>Fever, headache and muscle pain followed by diarrhea (sometimes bloody), abdominal pain, and nausea that appear 2 to 5 days after eating; may last 7 to 10 days. May spread to bloodstream and cause a life-threatening infection.</li> </ul>
<b><i>Cryptosporidium</i></b>	
<b>Associated Foods/Sources</b> <ul style="list-style-type: none"> <li>Swallowing contaminated water, including that from recreational sources, e.g, a swimming pool or lake)</li> <li>Eating uncooked or contaminated food</li> <li>Placing a contaminated object in the mouth</li> <li>Soil, food, water, contaminated surfaces</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>Dehydration, weight loss, stomach cramps or pain, fever, nausea, and vomiting; respiratory symptoms may also be present.</li> <li>Symptoms begin 2 to 10 days after becoming infected, and may last 1 to 2 weeks. Those with a weakened immune system, including transplant recipients, may experience a more serious illness.</li> </ul>
<b><i>Escherichia coli</i> O157:H7</b>	
One of several strains of <i>E. coli</i> that can cause human illness	
<b>Associated Foods/Sources</b> <ul style="list-style-type: none"> <li>Undercooked beef, especially hamburger</li> <li>Unpasteurized milk and juices, like “fresh” apple cider</li> <li>Contaminated raw fruits and vegetables, and water</li> <li>Person-to-person</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>Severe diarrhea that is often bloody, abdominal cramps, and vomiting. Usually little or no fever.</li> <li>Can begin 1 to 8 days after food is eaten and last about 5 to 10 days.</li> <li>Some, especially the very young, may develop hemolytic-uremic syndrome (HUS), which causes acute kidney failure.</li> </ul>

<b><i>Listeria monocytogenes</i></b> Can grow slowly at refrigerator temperatures	
<b>Associated Foods</b> <ul style="list-style-type: none"> <li>• Contaminated hot dogs, luncheon meats, cold cuts, fermented or dry sausage, and other deli-style meat and poultry</li> <li>• Soft cheeses and unpasteurized milk</li> <li>• Smoked seafood and salads made in the store such as ham salad, chicken salad, or seafood salad</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>• Fever, chills, headache, backache, sometimes upset stomach, abdominal pain, and diarrhea. May take up to 3 weeks to become ill.</li> <li>• Those at-risk (including transplant recipients and others with weakened immune systems) may later develop more serious illness; death can result from this bacteria.</li> <li>• Can cause problems with pregnancy, including miscarriage, fetal death, or severe illness or death in newborns.</li> </ul>
<b><i>Noroviruses (and other calciviruses)</i></b>	
<b>Associated Foods</b> <ul style="list-style-type: none"> <li>• Shellfish and fecally contaminated foods or water</li> <li>• Ready-to-eat foods touched by infected food workers; e.g., salads, sandwiches, ice, cookies, fruit</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>• Nausea, vomiting, stomach pain, fever, muscle aches, and some headache usually appear within 1 to 2 days and may last 1 to 2 days.</li> <li>• Diarrhea is more prevalent in adults and vomiting is more prevalent in children.</li> </ul>
<b><i>Salmonella</i> (over 2,300 types)</b>	
<b>Associated Foods</b> <ul style="list-style-type: none"> <li>• Raw or undercooked eggs, poultry, and meat</li> <li>• Unpasteurized milk or juice</li> <li>• Cheese and seafood</li> <li>• Contaminated fresh fruits and vegetables</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>• Stomach pain, diarrhea, nausea, chills, fever, and/or headache usually appear 8 to 72 hours after eating; may last 4 to 7 days.</li> <li>• A more severe illness may result if the infection spreads from the intestines to the bloodstream. Without treatment, death may result.</li> </ul>

<b><i>Toxoplasma gondii</i></b>	
<b>Associated Foods/Sources</b> <ul style="list-style-type: none"> <li>• Accidental ingestion of cat feces through touching hands to mouth after gardening, handling cats, cleaning cat's litter box, or touching anything that has come in contact with cat feces</li> <li>• Raw or undercooked meat</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>• Flu-like illness that usually appears 5 to 23 days after eating, may last months. Those with a weakened immune system, including transplant recipients, may develop more serious illness.</li> <li>• Can cause problems with pregnancy, including miscarriage.</li> </ul>
<b><i>Vibrio Vulnificus</i></b>	
<b>Associated Foods</b> <ul style="list-style-type: none"> <li>• Undercooked or raw seafood (fish or shellfish)</li> </ul>	<b>Symptoms and Potential Impact</b> <ul style="list-style-type: none"> <li>• Diarrhea, stomach pain, and vomiting may appear within 1 to 7 days and last 2 to 8 days. May result in a blood infection. May result in death for those with a weakened immune system, including transplant recipients.</li> </ul>

## **Eating at Home: Making Wise Food Choices**

Some foods are more risky for you than others. In general, the foods that are most likely to contain pathogens fall into two categories:

- **Uncooked** fresh fruits and vegetables
- **Animal products**, such as unpasteurized milk, soft cheeses, raw eggs, raw meat, raw poultry, raw fish, raw seafood and their juices

Interestingly, the risk these foods may actually pose depends on its origin or source and how it is processed, stored, and prepared. Follow these guidelines (see chart on page 8) for safe selection and preparation of your favorite foods.

### **If You Have Questions ...**

#### **... about Wise Food Choices:**

Be sure to consult with your transplant coordinator. He or she can answer any specific questions or help you in your choices.

#### **... about Particular Foods:**

If you aren't sure about the safety of a food in your refrigerator, don't take the risk.

*When in doubt, throw it out!*

*Wise choices in your food selections are important.*

All consumers need to follow the Four Basic Steps to Food Safety: **Clean, Separate, Cook, and Chill.**

**Common Foods: Select the Lower Risk Options**

<b>Type of Food</b>	<b>Higher Risk</b>	<b>Lower Risk</b>
<b>Meat and Poultry</b>	<ul style="list-style-type: none"> <li>• Raw or undercooked meat or poultry</li> </ul>	<ul style="list-style-type: none"> <li>• Meat or poultry cooked to a safe minimum internal temperature</li> </ul>
<p><i>Tip: Use a food thermometer to check the internal temperature. See “Is It Done Yet?” chart on page 11 for specific safe minimum internal temperature.</i></p>		
<b>Seafood</b>	<ul style="list-style-type: none"> <li>• Any raw or undercooked fish, e.g., sushi or ceviche</li> <li>• Refrigerated smoked fish</li> <li>• Precooked seafood, such as shrimp and crab</li> </ul>	<ul style="list-style-type: none"> <li>• Smoked fish and precooked seafood heated to 165 °F</li> <li>• Canned fish and seafood</li> <li>• Seafood cooked to 145 °F</li> </ul>
<b>Milk</b>	<ul style="list-style-type: none"> <li>• Unpasteurized milk</li> </ul>	<ul style="list-style-type: none"> <li>• Pasteurized milk</li> </ul>
<b>Eggs</b>	<p>Foods that contain uncooked eggs, such as:</p> <ul style="list-style-type: none"> <li>• Caesar salad dressings*</li> <li>• Homemade raw cookie dough*</li> <li>• Homemade eggnog*</li> </ul>	<p><i>At home:</i></p> <ul style="list-style-type: none"> <li>• Use pasteurized eggs/egg products when preparing recipes that call for raw or undercooked eggs</li> </ul> <p><i>When eating out:</i></p> <ul style="list-style-type: none"> <li>• Ask if pasteurized eggs were used</li> </ul>
<p><i>*Tip: Most pre-made foods from grocery stores, such as Caesar dressing, pre-made cookie dough, or packaged eggnog are made with pasteurized eggs.</i></p>		
<b>Sprouts</b>	<ul style="list-style-type: none"> <li>• Raw sprouts (alfalfa, bean, or any other sprout)</li> </ul>	<ul style="list-style-type: none"> <li>• Cooked sprouts</li> </ul>
<b>Vegetables</b>	<ul style="list-style-type: none"> <li>• Unwashed fresh vegetables, including lettuce/salads</li> </ul>	<ul style="list-style-type: none"> <li>• Washed fresh vegetables, including salads</li> </ul>



<b>Cheese</b>	<ul style="list-style-type: none"> <li>• Soft cheeses made from unpasteurized milk, such as: <ul style="list-style-type: none"> <li>○ Feta</li> <li>○ Brie</li> <li>○ Camembert</li> <li>○ Blue-veined cheese</li> <li>○ Queso fresco</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Hard cheeses</li> <li>• Processed cheeses</li> <li>• Cream cheese</li> <li>• Mozzarella</li> <li>• Soft cheeses that are clearly labeled “made from pasteurized milk”</li> </ul>
<b>Hot Dogs and Deli Meats</b>	<ul style="list-style-type: none"> <li>• Hot dogs, deli meats, and luncheon meats that have not been reheated</li> </ul>	<ul style="list-style-type: none"> <li>• Hot dogs, luncheon meats, and deli meats reheated to steaming hot or 165 °F</li> </ul>
<p><i>Tip: You need to reheat hotdogs, deli meats, and luncheon meats before eating them because the bacteria Listeria monocytogenes grows at refrigerated temperatures. This bacteria may cause severe illness, hospitalization, or even death. Reheating these foods destroys this dangerous bacteria, making these foods safe for you to eat.</i></p>		
<b>Pâtés</b>	<ul style="list-style-type: none"> <li>• Unpasteurized, refrigerated pâtés or meat spreads</li> </ul>	<ul style="list-style-type: none"> <li>• Canned pâtés or meat spreads</li> </ul>

## **Taking Care:** *Handling and Preparing Food Safely*

Foodborne pathogens are sneaky. You can't tell by looking, smelling, or even tasting a food whether it contains pathogens. But these pathogens — like disease-causing bacteria, viruses, or parasites — can make you sick.

As a transplant recipient, it is especially important for you — or those preparing your food — to be careful with food handling and preparation. The easiest way to do this is to follow the Four Basic Steps to Food Safety – *clean, separate, cook, and chill* -- from the Fight BAC!<sup>®</sup> Campaign, the national campaign developed and promoted by the Partnership for Food Safety Education.

### *Four Basic Steps to Food Safety*

#### **1. Clean:** *Wash hands and surfaces often*

Bacteria can spread throughout the kitchen and get onto cutting boards, utensils, counter tops, and food.

#### **To ensure that your hands and surfaces are clean, be sure to:**

- Wash hands in warm soapy water for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, or handling pets.
- Wash cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item and before going on to the next food.
- Consider using paper towels to clean up kitchen surfaces. If using cloth towels, you should wash them often in the hot cycle of the washing machine.
- Wash produce. Rinse fruits and vegetables, and rub firm-skin fruits and vegetables under running tap water, including those with skins and rinds that are not eaten.
- With canned goods: remember to clean lids before opening.

#### **2. Separate:** *Don't cross-contaminate*

Cross-contamination occurs when bacteria are spread from one food product to another. This is especially common when handling raw meat, poultry, seafood, and eggs. The key is to keep these foods — and their juices — away from ready-to-eat foods.

#### **To prevent cross-contamination, remember to:**

- Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and in your refrigerator.
- Use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs without first washing the plate with hot soapy water.
- Don't reuse marinades used on raw foods unless you bring them to a boil first.

### 3. Cook: *Cook to proper temperatures*

Foods are safely cooked when they are heated to the USDA-recommended safe minimum internal temperatures, as shown on the “Is It Done Yet?” chart (see below).

#### To ensure that your foods are cooked safely, always:

- Use a food thermometer to measure the internal temperature of cooked foods. Check the internal temperature in several places to make sure that the meat, poultry, seafood, or egg product is cooked all the way through.
- Cook ground beef to at least 160 °F and ground poultry to a safe minimum internal temperature of 165 °F. Color of food is not a reliable indicator of safety or doneness.
- Reheat fully cooked hams packaged at a USDA-inspected plant to 140 °F. For fully cooked ham that has been repackaged in any other location or for leftover fully cooked ham, heat to 165 °F.
- Cook seafood to 145 °F. Cook shrimp, lobster, and crab until they turn red and the flesh is pearly opaque. Cook clams, mussels, and oysters until the shells open.
- Cook eggs until the yolks and whites are firm. Use only recipes in which the eggs are cooked or heated to 160 °F.
- Bring sauces, soups, and gravy to a boil when reheating. Heat other leftovers to 165 °F.
- Reheat hot dogs, luncheon meats, bologna, and other deli meats until steaming hot or 165 °F.
- When cooking in a microwave oven, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer. Food is done when it reaches the USDA recommended safe minimum internal temperature.

#### Is It Done Yet?

You can't tell by looking. Use a food thermometer to be sure.

#### USDA Recommended Internal Temperatures

Steaks & Roasts 145 °F	Fish 145 °F	Pork 160 °F	Ground Beef 160 °F	Egg Dishes 160 °F	Chicken Breasts 165 °F	Whole Poultry 165 °F
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### 4. Chill: *Refrigerate promptly*

Cold temperatures slow the growth of harmful bacteria. Keeping a constant refrigerator temperature of 40 °F or below is one of the most effective ways to reduce risk of foodborne illness. Use an appliance thermometer to be sure the refrigerator temperature is consistently 40 °F or below and the freezer temperature is 0 °F or below.

**To chill foods properly:**

- Refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of cooking or purchasing. Refrigerate within 1 hour if the temperature outside is above 90 °F.
- Never thaw food at room temperature, such as on the counter top. It is safe to thaw food in the refrigerator, in cold water, or in the microwave. If you thaw food in cold water or in the microwave, you should cook it immediately.
- Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.
- Follow the recommendations in the abridged USDA Cold Storage Chart (see page 13). The USDA Cold Storage Chart in its entirety may be found at <http://www.foodsafety.gov/~fsg/f01chart.html>

## USDA Cold Storage Chart

These time limit guidelines will help keep refrigerated food safe to eat. Because freezing keeps food safe indefinitely, recommended storage times are for quality only.

Product	Refrigerator (40 °F)	Freezer (0 °F)
<b>Eggs</b>		
Fresh, in shell	3 to 5 weeks	Don't freeze
Hard cooked	1 week	Don't freeze well
<b>Liquid Pasteurized Eggs, Egg Substitutes</b>		
Opened	3 days	Don't freeze well
Unopened	10 days	1 year
<b>Deli or Vacuum-Packed Products</b>		
Egg, chicken, ham, tuna, & macaroni salads	3 to 5 days	Don't freeze well
<b>Hot Dogs</b>		
Opened package	1 week	1 to 2 months
Unopened package	2 weeks	1 to 2 months
<b>Luncheon Meat</b>		
Opened package	3 to 5 days	1 to 2 months
Unopened package	2 weeks	1 to 2 months
<b>Bacon &amp; Sausage</b>		
Bacon	7 days	1 month
Sausage, raw — from chicken, turkey, pork, beef	1 to 2 days	1 to 2 months
<b>Hamburger and Other Ground Meats</b>		
Hamburger, ground beef, turkey, veal, pork, lamb, & mixtures of them	1 to 2 days	3 to 4 months
<b>Fresh Beef, Veal, Lamb, Pork</b>		
Steaks	3 to 5 days	6 to 12 months
Chops	3 to 5 days	4 to 6 months
Roasts	3 to 5 days	4 to 12 months
<b>Fresh Poultry</b>		
Chicken or turkey, whole	1 to 2 days	1 year
Chicken or turkey, pieces	1 to 2 days	9 months
<b>Seafood</b>		
Lean fish (flounder, haddock, halibut, etc.)	1 to 2 days	6 to 8 months
Fatty fish (salmon, tuna, etc.)	1 to 2 days	2 to 3 months
<b>Leftovers</b>		
Cooked meat or poultry	3 to 4 days	2 to 6 months
Chicken nuggets, patties	1 to 2 days	1 to 3 months
Pizza	3 to 4 days	1 to 2 months

### **In the Know:** *Becoming a Better Shopper*

Follow these safe food-handling practices while you shop.

- Carefully read food labels while in the store to make sure food is not past its “sell by” date. (See Food Product Dating on page 15.)
- Put raw packaged meat, poultry, or seafood into a plastic bag before placing it in the shopping cart, so that its juices will not drip on — and contaminate — other foods.
- Buy only pasteurized milk, cheese, and other dairy products from the refrigerated section. When buying fruit juice from the refrigerated section of the store, be sure that the juice label says it is pasteurized.
- Purchase eggs in the shell from the refrigerated section of the store. (Note: store the eggs in their original carton in the main part of your refrigerator once you are home.) For recipes that call for eggs that are raw or undercooked when the dish is served – Caesar salad dressing and homemade ice cream are two examples – use either shell eggs that have been treated to destroy *Salmonella*, by pasteurization, or pasteurized egg products. When consuming raw eggs, using pasteurized eggs is the safer choice.
- Never buy food that is displayed in unsafe or unclean conditions.
- When purchasing canned goods, make sure that they are free of dents, cracks or bulging lids. (Once you are home, remember to clean each lid before opening the can.)

*When shopping for food, reading the label carefully is key.*

## **Food Product Dating**

Read the “Safe Handling Label” for food safety information on raw foods. Open dating is found primarily on perishable foods such as meat, poultry, eggs, and dairy products. “Closed” or “coded” dating might appear on shelf-stable products such as cans and boxes of food.

### **Types of Open Dates**

- A **“Sell-By”** date tells the store how long to display the product for sale. You should buy the product before the date expires.
- A **“Best if Used By (or Before)”** date is recommended for best flavor or quality. It is not a purchase or safety date.
- A **“Use-By”** date is the last date recommended for the use of the product while at peak quality. The date has been determined by the manufacturer of the product.

**“Closed or coded dates”** are packing numbers for use by the manufacturer.

## **Transporting Your Groceries**

Follow these tips for safe transporting of your groceries:

- Pick up perishable foods last, and plan to go directly home from the grocery store.
- Always refrigerate perishable foods within 2 hours of cooking or purchasing.
- Refrigerate within 1 hour if the temperature outside is above 90 °F.
- In hot weather, take a cooler with ice or another cold source to transport foods safely.

## Being Smart When Eating Out

Eating out can be lots of fun — so make it an enjoyable experience by following some simple guidelines to avoid foodborne illness. Remember to observe your food when it is served, and don't ever hesitate to ask questions before you order. Waiters and waitresses can be quite helpful if you ask how a food is prepared. Also, let them know you don't want any food item containing raw meat, poultry, fish, or eggs.

### Basic Rules for Ordering

- Ask whether the food contains uncooked ingredients such as eggs, meat, poultry, or fish. If so, choose something else.
- Ask how these foods have been cooked. If the server does not know the answer, ask to speak to the chef to be sure your food has been cooked to a safe minimum internal temperature.
- Avoid buffets, which may contain undercooked foods or foods that have been at room temperature too long. Order from a menu to minimize your risk.
- If you plan to get a “doggy bag” or save leftovers to eat at a later time, refrigerate perishable foods as soon as possible – and always within 2 hours after purchase or delivery. If the leftover is in air temperatures above 90 °F, refrigerate within 1 hour.

*If in doubt, make another selection!*

### Smart Menu Choices

<b>Choose:</b>	<b>Avoid:</b>
Hard or processed cheeses, or soft cheeses only if made from pasteurized milk.	Cheese made from unpasteurized milk.
Fully cooked smoked fish or seafood.	Raw or undercooked seafood.
Hot dogs reheated to steaming hot. If the hot dogs are served cold or lukewarm, ask to have them reheated until steaming, or else choose something else.	Cold hot dogs.
Grilled sandwiches in which the meat or poultry is heated until steaming.	Sandwiches with cold deli or luncheon meat.
Fully cooked fish that is firm and flaky.	Raw or undercooked fish, such as sushi or sashimi.
Fully cooked eggs with firm yolk and whites.	Soft-boiled or “over-easy” eggs, as the yolks are not fully cooked.

*Ask questions about how your food is cooked.*



### **Tips for Transporting Food**

- Keep cold food cold, at 40 °F or below. To be safest, place cold food in cooler with ice or frozen gel packs. Use plenty of ice or frozen gel packs. Cold food should be at 40 °F or below the entire time you are transporting it.
- Hot food should be kept hot at 140 °F or above. Wrap the food well and place in an insulated container.

### **Stay “Food Safe” When Traveling Internationally**

Discuss your travel plans with your physician before traveling to other countries. Your physician may have specific recommendations for the places you are visiting, and may suggest extra precautions or medications to take on your travels.

For more information about safe food and water while traveling abroad, access the Centers for Disease Control and Prevention Web site at **[www.cdc.gov/travel](http://www.cdc.gov/travel)**.

*Select your foods with care when traveling to other countries.*

**Foodborne Illness:** *Know the Symptoms*

Despite your best efforts, you may find yourself in a situation where you suspect you have a foodborne illness. Foodborne illness often presents itself with flu-like symptoms.

These symptoms include:

- Nausea
- Vomiting
- Diarrhea
- Fever

If you suspect that you could have a foodborne illness, there are four key steps that you should take. Follow the guidelines in the Foodborne Illness Action Plan on page 19, which begins with contacting your physician or health care provider right away.

*When in doubt — contact your physician or health care provider*

*My Physicians: Quick reference List*

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Specialty: \_\_\_\_\_

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Specialty: \_\_\_\_\_

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Specialty: \_\_\_\_\_

## Foodborne Illness Action Plan

*If you suspect you have a foodborne illness, follow these general guidelines:*

**1. Consult your transplant coordinator or physician, or seek medical treatment as appropriate.**

As a transplant recipient on immunosuppressive medications, you are at increased risk for severe infection.

- Contact your physician immediately if you develop symptoms or think you may be at risk.
- If you develop signs of infection as discussed with your physician, seek out medical advice and/or treatment immediately.

**2. Preserve the food.**

- If a portion of the suspect food is available, wrap it securely, label it to say “DANGER,” and freeze it.
- The remaining food may be used in diagnosing your illness and in preventing others from becoming ill.

**3. Save all the packaging materials, such as cans or cartons.**

- Write down the food type, the date and time consumed, and when the onset of symptoms occurred.
- Save any identical unopened products.
- Report the contaminated food to the USDA Meat and Poultry Hotline, **1-888-MPHotline (1-888-674-6854)**. The toll-free number for the hearing impaired (TTY) is **1-800-256-7072**.

**4. Call your local health department . . .**

... if you believe you became ill from food you ate in a restaurant or other food establishment.

- The health department staff will be able to assist you in determining whether any further investigation is warranted.
- To locate your local health department, visit [http://healthguideusa.org/local\\_health\\_departments.htm](http://healthguideusa.org/local_health_departments.htm).

**For More Information on Food Safety**

You may contact the USDA Food Safety and Inspection Service to obtain additional food safety information in both English and Spanish.

**Online:**

Information can also be accessed on the FSIS Web site at [www.fsis.usda.gov](http://www.fsis.usda.gov).

- Food Safety Questions? “Ask Karen” -- the FSIS Virtual Representative — an automated response system available 24/7 at [www.fsis.usda.gov](http://www.fsis.usda.gov).
- Send e-mail inquiries to [mphotonline.fsis@usda.gov](mailto:mphotonline.fsis@usda.gov).

**By Phone:**

Call the USDA Meat and Poultry Hotline at 1-888-MPHotline (1-888-674-6854) or TTY: 1-800-256-7072.

- The year-round, toll-free Hotline is available Monday through Friday from 10 a.m. to 4 p.m. Eastern Time.
- An extensive selection of timely food safety messages is also available at the same number, 24 hours a day.

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**Local Resources:**

**State Department of Agriculture:** \_\_\_\_\_

**Health Department:** \_\_\_\_\_

**Other:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## **Additional Food Safety Resources**

Food and Drug Administration

[www.cfsan.fda.gov](http://www.cfsan.fda.gov)

Centers for Disease Control and Prevention

1-888-232-3228 (24-hour recorded information)

[www.cdc.gov/foodsafety](http://www.cdc.gov/foodsafety)

- National Center for Infectious Diseases/Traveler's Health  
[www.cdc.gov/travel/index.htm](http://www.cdc.gov/travel/index.htm)
- National Center for Infectious Diseases /Water-Related Diseases  
[www.cdc.gov/ncidod/diseases/water/index.htm](http://www.cdc.gov/ncidod/diseases/water/index.htm)

U.S. Environmental Protection Agency Office of Water

[www.epa.gov/OW](http://www.epa.gov/OW)

Gateway to Government Food Safety Information

[www.foodsafety.gov](http://www.foodsafety.gov)

Partnership for Food Safety Education (Fight BAC!<sup>®</sup>)

[www.fightbac.org](http://www.fightbac.org)

Clip out these handy Info Cards and carry them for quick reference when shopping, cooking, and eating out!

Card 1

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**Food Safety Tips for Smart Food Shoppers**

- Check “Sell-By” date
- Put raw meat, poultry or seafood in plastic bags
- Buy only pasteurized milk, cheese, dairy products, and juices
- When buying eggs:
  - Purchase refrigerated shell eggs
  - If your recipe calls for raw eggs, purchase pasteurized, refrigerated liquid eggs
- Don’t buy food displayed in unsafe or unclean conditions

Card 2

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**Is It Done Yet?**

You can’t tell by looking. Use a food thermometer to be sure.

USDA Recommended Safe Minimum Internal Temperatures

Steaks & Roasts 145 °F	Fish 145 °F	Pork 160 °F	Ground Beef 160 °F	Egg Dishes 160 °F	Chicken Breasts 165 °F	Whole Poultry 165 °F
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Card 3

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**Ordering “Smart” When Eating Out**

<b>Choose:</b>	<b>Avoid:</b>
Hard or processed cheeses. Soft cheeses only if made from pasteurized milk.	Cheese made from unpasteurized milk.
Fully cooked smoked fish or seafood.	Raw or undercooked seafood.
Hot dogs reheated to steaming hot. If the hot dogs are served cold or lukewarm, ask to have the hot dogs reheated until steaming, or else choose something else.	Cold hot dogs.
Grilled sandwiches in which the meat or poultry is heated until steaming.	Sandwiches with cold deli or luncheon meat.
Fully cooked fish that is firm and flaky.	Raw or undercooked fish, such as sushi or sashimi.
Fully cooked eggs with firm yolk and whites.	Soft-boiled or “over-easy” eggs, as the yolks are not fully cooked.

*Thank you to Samuel James, M.D., for his medical expertise and guidance. Thanks also to Lydia Medeiros, Ph.D., R.D., Patricia A. Kendall, Ph.D., R.D., and Val Hillers, Ph.D., R.D. for their assistance and groundbreaking research to the at-risk community.*

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September 2006