Foodborne illness outbreaks can happen anywhere and can affect a large number of people. Many outbreaks result because a food worker may not take food safety seriously!

The good news is that a foodborne illness is preventable! Follow these tips to avoid a foodborne illness outbreak:

**KEEP CLOTHES CLEAN**
Dirty clothes not only give customers a bad impression, but also carry harmful microorganisms.
- Wear clean clothes.
- Wear clean aprons.
- Roll up long sleeves.
- Keep hair from falling into food! Wear hair pulled back and/or wear a cap.
- Remove aprons when leaving area.

**KEEP HANDS CLEAN**
Hand-washing is one of the easiest, most effective ways to prevent foodborne illnesses.
- Wash hands often: Before you start your shift; before putting on gloves; after handling raw foods; after coughing or blowing your nose; after handling the garbage; after using the bathroom; after handling money.
- Wash hands with lots of soap. Soap creates a slippery surface for the “germs” to slide off.
- Scrub hands together for at least 10–15 seconds. (sing Happy Birthday to yourself)
- Dry hands on a paper towel. Do NOT use dish towels or apron or your clothes to dry your hands!
- If you have a cut on your hand, use plastic gloves.
- Trim fingernails and keep them clean.

**SERVE FOOD SAFELY**
- Serve food, not fingers! Do NOT touch food with bare hands. Use tongs, forks, gloves, deli tissues or scoops to handle food.
- Protect foods from dust, sneezing, and handling by guests. Use appropriate packaging and covers on food.
- Never chew gum.
- Do NOT prepare food or work if you are sick with vomiting and/or diarrhea.

**USE CLEAN EQUIPMENT/UTENSILS**
When dirty equipment and utensils are used, harmful microorganisms will be transferred to the food.
- Use a mechanical dishwasher OR 3 sinks for washing, rinsing and sanitizing.
- Use clean dishes and utensils for food preparation.
- Wash equipment and utensils with hot, soapy water after use with each type of food, when preparing several foods (e.g., cutting pies, then salad greens).
- Wash and sanitize food contact surfaces (e.g., counters, tables, refrigerators, etc.).

**USE PROPER SANITIZING SOLUTIONS**
- Use chlorine bleach and water to make a sanitizing solution.
- Washing dishes and utensils:
  1. Wash in warm soapy water.
  2. Rinse in clear water.
  3. Sanitize for at least 10 seconds. Use 1 tablespoon bleach per 1 gallon of water (use 2 tsp concentrated bleach per gallon of water).
  4. Air dry.
- Sanitize any surface that may come in direct contact with food—like counters, tables, etc. Use a cloth dipped in solution or spray on sanitizer and let air dry.
USE A FOOD THERMOMETER
Eating undercooked foods has resulted in serious food-borne illness outbreaks.
- Use a calibrated food thermometer to check that foods are cooked to the proper internal temperature.
- The following foods should reach an internal temperature of:

<table>
<thead>
<tr>
<th>Product</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole meats (chops, steaks, roasts)</td>
<td>145°F, plus 3 minute rest/stand time for safety</td>
</tr>
<tr>
<td>Ground meats</td>
<td>160°F</td>
</tr>
<tr>
<td>Poultry, ground or whole</td>
<td>165°F</td>
</tr>
<tr>
<td>Soup, stews, egg dishes, stuffing, casseroles</td>
<td>165°F</td>
</tr>
</tbody>
</table>

Source: USDA, Revised Cooking Temperature, May 2011

KEEP HOT FOODS HOT
If hot foods are held below 140°F, microorganisms will grow rapidly.
- Keep hot foods at 140°F or higher.
- Keep food hot in a 200°F oven.
- Use a food thermometer to check the temperature of hot foods.
- Keep each batch of food in a separate pan. (Don’t mix batches of food items.)
- Do not let hot food sit at room temperature for more than 2 hours.

KEEP COLD FOODS COLD
If cold foods are held between 40°–140°F, microorganisms will grow rapidly.
- Keep cold foods at 40°F or lower.
- Limit time at room temperature to 2 hours (maximum) to preserve quality and safety. (For cold foods in hot weather, time should be no more than 1 hour.)
- Refrigerate ingredients for mixed foods prior to combining. (i.e., refrigerate potatoes and eggs before combining with dressing when making potato salad)

Used with permission by Barbara Fuller, Nutrition and Health Specialist, ISU Extension and Outreach.

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COOL FOODS CORRECTLY
Hot foods stored in large containers in the refrigerator cannot cool down quickly.
- Foods must be cooled from 140°F to 70°F within 2 hours and then cooled to 40°F or lower in an additional 4 hours.
- Store foods in small shallow pans (2–3 inches deep) and refrigerate immediately.
- Metal containers chill foods fast.
- Use ice to quickly chill foods and to keep them cold.

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