Getting food from producer to table can take many steps today, from farm production to slaughtering or harvesting, storing, transporting and distributing – all before the food reaches the store or farmer's market. From there, food must be purchased and taken to the customer's home, where preparation, serving and sometimes reheating can take place. With all these steps, there are many opportunities for food contamination to take place.

In Catawba County, Environmental Health inspectors help ensure that opportunities for contamination are held to a minimum at meat markets, restaurants and more.

Although there are so many steps along the way where things can go awry, the United States' food supply is one of the safest in the world, according to the U.S. Food and Drug Administration. However, there are still cases of what we call "food poisoning" every day. When certain disease-causing pathogens contaminate food, they can cause foodborne illness – roughly 48 million cases – the equivalent of sickening one in six Americans each year. These illnesses result in an estimated 128,000 hospitalizations and 3,000 deaths a year in the U.S.

While most cases will clear up in a few days on their own, some foodborne illnesses can be serious — or even fatal. Anyone, of any age or health condition, could get very sick or die from these bacteria. This is especially true for people with weak immune systems, children, and the elderly. Pregnant women also need to be especially careful since some bacteria are very harmful or deadly to unborn babies.

Because foodborne illness can affect anyone, it's important for everyone to practice safe food handling behaviors to help reduce your risk of accidentally getting sick from contaminated food. When serving a crowd, a large number of people can get sick quickly from just one contaminated dish – a miserable way to spend a holiday.

Consumers expect food that they buy in supermarkets to be germ free. However, 100 percent of the microorganisms present in food can't be killed before being sold. When you shop, buy perishable foods last, take food straight home to the refrigerator, and don't buy anything you won't use before the use-by date.

After getting holiday dish ingredients home, consumers can follow four rules of thumb from the Food and Drug Administration and Food Insight.

Clean: Wash hands before and after food prep, and clean cutting boards, surfaces and utensils between uses with hot, soapy water. Always use clean platters for serving. Don't reuse one that held raw food or marinade without washing it first. Use paper towels to clean up. Cloth towels and sponges can be havens for germs. Rinse and scrub fresh fruits and vegetables under running tap water. Remember to clean lids on canned goods before opening.

Separate: Separate raw meats, poultry and seafood in your shopping cart and the refrigerator to prevent cross contamination. If possible, use separate cutting boards: one for fruits and vegetables, one for raw meats. Use clean dishes and utensils to serve food, not those used in preparation. Need to restock? Don't add new food to an already-filled serving dish. Instead, replace nearly-empty serving dishes with freshly-filled ones. During the course of a party, bacteria from people's hands can contaminate the food. Plus, bacteria can multiply at room temperature.

Cook: Heating foods to the right temperature for the proper amount of time kills harmful bacteria, so cook meat, poultry, fish, and eggs thoroughly. Use a food thermometer to be sure, and use a safe food temperature list. If making sauces or gravy using meat juices, be sure to bring it to a boil before serving.

Are you cooking with the microwave? Cover the dish with a lid or plastic wrap to allow steam to build in the product. Use a food thermometer to read temperatures at different locations in the product. Arrange food evenly to ensure uniform cooking. Stir or rotate foods to eliminate spots that remain cold. Observe the "standing time" recommended on food packages. Cooking continues and is completed during this time.

Chill: Refrigerate all perishables (foods that can spoil or become contaminated by bacteria if unrefrigerated) up until party time. Discard any perishable foods that were left at room temperature for more than two hours. Thaw food in the refrigerator or microwave, not on the kitchen counter; marinate in the refrigerator. Keep cold foods refrigerated until serving time.

Are you sending leftovers home or saving some for yourself? Refrigerate them within two hours of being served. Make sure they are placed in small, shallow containers for quick cooling in the fridge. Refrigerate foods quickly. The cold temperatures in refrigeration slow the growth of harmful bacteria. Do not over-stuff the refrigerator. Cold air must circulate to help keep food safe.

After your holiday event, don't eat foods that have been kept in the refrigerator for more than a few days. Never taste food that looks or smells strange to see if you can still use it. When in doubt, always throw it out.

Although we can't control everything that happens from farm to table, we can take steps to ensure our food is safe to eat. Hopefully, these tips will help keep you and your loved ones free of food poisoning this holiday season.

For more information on proper cooking temperatures and holding temperatures for buffet-style gatherings, go to
http://www.fda.gov/downloads/Food/FoodborneIllnessContaminants/UCM257049.pdf.