**Inspection**

Throughout the twentieth century, the meat and poultry industry has become one of the most heavily regulated industries in the United States. The U.S. meat and poultry inspection system has augmented industry efforts to create the safest meat and poultry food supply in the world.

- 1906: Congress passed the Meat Inspection Act, one of the first federal consumer protection measures;
- 1957: Meat Act was amended by the Federal Meat Inspection Act (FMIA). The poultry industry came under federal regulation with the passage of the Poultry Products Inspection Act (PPIA).

The FMIA established sanitary standards for slaughter and processing establishments and mandated antemortem inspection of live animals (cattle, hogs, sheep and goats) and postmortem inspection of every carcass. Many people are surprised to learn that the law requires the continuous presence of federal inspectors in all meat-packing establishments. Some large plants may have a dozen inspectors per shift in their plants.

The meat inspection program that developed early in the 20th century used organoleptic methods, based on sight, touch and smell. The goal of the system was to prevent unwholesome meat from entering the food supply by identifying and removing diseased animals. Today, approximately 8,500 federal inspectors enforce inspection laws in some 6,200 federally inspected plants across the United States.

Veterinary inspectors check animals before and after slaughter, visually and physically examining more than 6 billion poultry carcasses and 125 million livestock carcasses each year. Federal inspectors also monitor products during processing, handling, and packaging to ensure that they are safe and accurately labeled. Federal inspectors have the authority to shut plants down for food safety violations by withholding the federal seal of inspection on products.

Inspectors also test for the presence of pathogenic microorganisms and some drug and chemical residues. FSIS operates three field laboratories to provide analytical support.

The largest threats to food safety in the meat industry are no longer the animal diseases of the early twentieth century, but foodborne pathogens — bacteria that can make people sick.

The most effective way to control microbial problems is through prevention. Industry had been using a system called HACCP, or Hazard Analysis and Critical Control Points, since the early 1990s to prevent problems. Pillsbury developed HACCP for NASA to make safe food for astronauts. Given its success, in 1994 American Meat Institute petitioned the U.S. Department of Agriculture to make HACCP mandatory in all meat and poultry plants. USDA
responded with a regulation and in 1998, the industry began the three-year process of implementing HACCP in accordance with federal rules.

Under HACCP, each plant must analyze the processes used to make different types of product and must identify where problems may occur. Food safety resources are then concentrated at these points. Essentially, HACCP is built on a strategy of preventing problems rather than simply detecting them. Federal inspectors are continuously present in the plants to determine that the plant is following its own HACCP plan and the product being produced meets federal standards. Since 1998 and the implementation of HACCP, there has been steady and significant declines in the levels of bacteria present in meat and poultry.

When suitable, plants use a variety of intervention strategies to eliminate forms of contamination on products. Metal detectors are used to ensure that no piece of metal — like a screw from a machine — makes its way into a product. Many beef packers use steam pasteurization cabinets to pasteurize the outsides of carcasses and destroy bacteria. Still other plants use a variety of hot water washes and hand-held steam vacuums to ensure that carcasses are as clean as they can be.

Reducing microbiological contamination in meat and poultry is a priority for the meat and poultry industry. Because microbial pathogens are invisible to the naked eye, and because they are difficult to detect quickly using current technology, eliminating pathogens presents unique challenges.

Microbiological tests conducted at meat plants on equipment or products include generic *E. coli*, *Listeria* species and *Listeria monocytogenes*, *Salmonella* and *E. coli* O157:H7. The tests are conducted by companies or federal inspectors and are an additional measure used to ensure that food safety systems are working properly.

Companies under federal inspection apply the USDA seal to all products. The seal contains an establishment number, which indicates the facility that produced the product. The presence of the seal indicates that the product was produced in compliance with industry regulations.

The inspection system, coupled with the industry’s commitment to producing the safest food possible, makes the U.S. meat and poultry supply is among the safest in the world.