The prevention of ingesta and fecal contamination of beef and poultry carcasses in slaughter establishments is a focal point of the current inspection system, because contamination of the flesh with feces and ingesta is a potential cause of contamination of meat and poultry products with harmful bacterial pathogens, such as *Salmonella, Campylobacter* and *E. coli* 0157:H7. Contamination can occur as a result of feces entering the slaughter facility on the external surface of the animal and contaminating the carcass during the skinning or defeathering process or as a result of ingesta or feces being spilled from the intestinal tract during evisceration or other steps in the process. Meat and poultry carcasses found to bear fecal contamination must be condemned or, if possible, reworked to remove the contamination in an accepted manner. Removing visible fecal contamination is important, but it does not assure the absence of harmful bacteria that cannot be detected visually.

The law requires inspected meat and poultry products to bear an official inspection legend (21 U.S.C. 601(n)(12), 453(h)(12)). Specifically, the words ''inspected and passed'' must appear on meat products found not to be adulterated (21 U.S.C. 606, 607; 9 CFR 312.2, 312.3); ''inspected for wholesomeness by U.S. Department of Agriculture'' must appear on poultry products (9 CFR 381.96). The term ''wholesome'' has traditionally been applied to meat or poultry found upon visual inspection to be free of disease, not decomposed, and to be otherwise fit for human consumption. While ''wholesome'' as used in this context is not intended to be synonymous with ''safe,'' consumers could reasonably infer a connection between ''wholesomeness'' and food safety. Similarly the words ''inspected and passed'' on meat products could be understood by consumers as a statement about safety, despite the fact that organoleptic inspection does not address invisible hazards, such as pathogenic microorganisms.

This problem concerning the meaning of the inspection legend arises in part from the fact that the requirement to place an inspection legend on every product that passes inspection was adopted before the safety concerns posed by pathogenic microorganisms, drug residues, and other invisible hazards came to the fore. Visual inspection does not directly address these safety issues on a carcass-by-carcass or product-by-product basis. Thus, some contend that the inspection legends serve only to mislead contemporary consumers and should be discontinued. FSIS invites public comment on this issue.

Of the 129,831,110 meat-animal carcasses inspected during Fiscal Year 1993, 384,543 (or .3 percent) were condemned for disease, contamination, or adulteration during ante- or postmortem inspection. Of the 7,085,491,852 poultry carcasses inspected that year, 63,926,693 (or .9 percent) were condemned. Today, more than 7,300 FSIS inspectors enforce the inspection laws in approximately 6,200 meat and poultry establishments. Inspection activities start prior to slaughter and continue throughout processing, handling, and packaging.

FSIS ensures compliance with inspection laws and regulations outside inspected establishments through control and condemnation of misbranded or adulterated products. Specifically, during FY 1993, FSIS detained suspect products 796 times (involving 13,081,409 pounds of product) and monitored product recalls 36 times (involving 5,726,378 pounds of product). During the same period, 145,526 meat and poultry product labels were reviewed; 10,154 were not approved. Other measures FSIS uses to enforce the regulations include withholding inspection pending correction of serious problems, controlling product distribution, working with companies to recall violative products, and seeking court-ordered product seizures when necessary.

The Performance-Based Inspection System (PBIS) is a modernization initiative implemented in processing establishments during 1989. PBIS is a structured, automated information system that helps the Agency document findings resulting from inspector tasks; record deficiencies found and actions taken; and discuss deficient findings and corrective actions with establishment management. PBIS is intended to make processing inspection more uniform nationwide and provides FSIS with its first easily accessible database on establishment performance. It enables the Agency to capture, store, and sort the vast quantities of information generated by the 13 million inspection tasks performed in processing establishments each year. These data allow the Agency to examine the long-term operation of a particular establishment or the performance of a particular control point nationwide. Decisions on inspection intensity are based on these data, although the frequency is never less than one visit per day.

FSIS expects to implement PBIS in slaughter operations during FY 1996.

Foodborne Illness in the United States

The safety of the meat and poultry supply has been widely discussed during the past few years. Although food safety can be affected by multiple factors, including animal drug and pesticide residues and unintentional environmental contaminants, the following discussion focuses on pathogenic microorganisms that are associated with foodborne illness, including the illness and preventable deaths associated with meat and poultry consumption. Pathogenic microorganisms are widely recognized by scientists to be the most significant causes of foodborne illness.

Foodborne illness can strike individuals of all ages, sexes, nationalities, and socioeconomic levels. The most common types of foodborne illness associated with pathogenic microorganisms typically appear as acute gastroenteritis with sudden onset of vomiting or diarrhea, or both, with accompanying abdominal pain. However, the exact combination of symptoms may vary widely, depending on the type of microorganism and the immune status of the person infected. For example, certain types of bacteria often cause bloody diarrhea, including *E. coli* 0157:H7 and, in a smaller percentage of cases, *Campylobacter jejuni. E. coli* 0157:H7 produces a strong toxin (''shiga-like'' toxin) which can lead to blood clotting abnormalities and kidney failure (hemolytic uremic syndrome) and can cause death, especially in young children and the elderly. Even if recovery from the acute illness is complete, 15–30 percent of persons with hemolytic uremic syndrome will have evidence of chronic kidney disease. While *Salmonella* ordinarily causes transitory and non-life-threatening acute gastroenteritis, *Salmonella* can get into the bloodstream of some infected patients, particularly patients who are very young, very old, or immunosuppressed (such as persons with AIDS); these bloodstream infections can have serious complications, including death. Infections caused by *Salmonella* may also trigger autoimmune phenomena, such as reactive arthritis, which may result in long-term disability.

While there is general consensus that foodborne illness is a major cause of morbidity and mortality in this country, estimates of the incidence of foodborne illness vary widely. The Centers for Disease Control and Prevention (CDC) maintains a national foodborne disease surveillance system, but the data in this