

## FOOD RECALL PROTECTS CONSUMERS FROM CONSUMING HAZARDOUS MEAT AND POULTRY PRODUCTS : A REVIEW ON 1995 – 1999 RECALL CASES FROM FSIS-USDA (Perlindungan Konsumen Terhadap Produk Daging dan Unggas yang Berpotensi Bahaya Melalui Penarikan Kembali : Tinjauan Terhadap Kasus Penarikan Kembali oleh FSIS-USDA Tahun 1995 – 1999)

Sri Raharjo<sup>\*)</sup>

### ABSTRACT

A recall is intended to remove meat or poultry from commerce when there is reason to believe that it may be injurious to health, unfit for human consumption, adulterated, or incorrect labeling. The objective of this study was to evaluate Recall Cases during the period of 1995 – 1999 as reported by the USDA-FSIS. During the period of 1995 – 1999, there were approximately 197 cases of recall were identified which consisted of 85% categorized as Class I and the remaining 15% as Class II. More than 50% of the recall were warranted due to the pathogenic bacteria contamination and only a small proportions were due to the presence of extraneous material, drug residues, inadequate processing, and incorrect labeling. At least 80% of the bacterial contamination were associated with *L. monocytogenes* and *E. coli* O157:H7. On the average more than 2 million pounds of defective or hazardous meat products were withdrawn from commerce and some of the recall resulted 100% product recovery. This suggests that the firms respond positively to the program and as a result consumer's safety can be enhanced.

Keywords : Food recall, meat, poultry products.

### INTRODUCTION

Consumers are not only demanding good tasting foods, but also need assurance of its safety. Meat and poultry products are even more susceptible to safety hazards due to its perish ability which require strict control. It is the responsibility of the government to regulate and take action to protect the consumers from consuming hazardous meat and poultry products. To do this the government needs a full cooperation from meat and poultry producers, processors, and traders. They should be convinced by the fact that their businesses will not prosper unless there are growing numbers of repeat customers. Therefore, they should show strong commitment to protect their customer's interest.

This ideal condition seems very remote to be in place in Indonesia at this time due to the obvious lack of drive to protect food consumer's interest. The law and regulations are there, but they are not effectively enforced. Majority of consumer's complaints was not responded. Consumers victimized by food poisoning incidences were not properly accounted for, data reporting system were not maintained, and manufacturers were not obligated to safeguard their consumers.

It is, therefore, important to appreciate a national food safety assurance system that effectively protects the consumers. The United States of America is one of few countries possessing an effective food safety measure especially with regard to meat and poultry products. Food Safety and Inspection Service (FSIS) of the US Department

of Agriculture is responsible for ensuring that meat and poultry products are safe, wholesome, and accurately labeled. This task can be fulfilled easier with the cooperation from manufacturers in the recall program. A recall is a voluntary action initiated by a manufacturer or distributor to protect the public from that may cause health problems or even fatalities.

The objective of this study was to evaluate the FSIS Recall Program effectiveness in protecting consumers from consuming hazardous meat and poultry products in the period of 1995 to 1999. Lessons learned from this study will be useful to provide direction for initiating similar program in Indonesia in the future.

### MATERIALS AND METHODS

The purpose of a recall is to remove meat and poultry from commerce when there is reason to believe it may be adulterated (injurious to health or unfit for human consumption) or misbranded. All recalls are voluntary. The manufacturer or distributor of the meat or poultry or the request of FSIS may initiate them. If a recall is ineffective and the public remains at risk, FSIS may suite the defective products or obtain an injunction against the manufacturer or distributor. To date, however, no company has ever refused a request from FSIS to recall a potentially unsafe food.

FSIS has standing Recall Committee that works with the company to coordinate the recall. The committee evaluates the health hazard presented by the product and categorizes it as class I, II or III. A Class I recall involves a health hazard situation where there is a reasonable probability that eating the food will cause health problem or death. A Class II Recall involves a potential health hazard situation where there is a remote probability of adverse health consequences from eating the food. A Class III Recall involves a situation when eating the food will not cause adverse health consequences.

Recall on meat and poultry products between 1995 to 1999 reported to the USDA-FSIS has accessed electronically through Internet. The number of recalls identified was 197 and subsequently categorized based on type of product, date of recall initiated, date of recall completed, reason for recall, quantity of products affected, and recall classification. FSIS field personnel conducted effectiveness checks to ensure that the firm makes all reasonable efforts to retrieve the meat and poultry product affected. A number of effectiveness checks were made to verify that the recall is conducted effectively and the firms capable in locating, retrieving, controlling, and disposing of the food conform to the regulation.

<sup>\*)</sup> Faculty of Agricultural Technology, Gadjah Mada University, Yogyakarta

## RESULTS AND DISCUSSION

Data reported by the USDA-FSIS indicated that during the period of 1995 – 1999 there were 197 recalls (Figure 1). The lowest number of recalls during that period was 24 in 1996. Within the last three years, however, there was steady increase in number of recalls from 25 in 1997 to 62 cases in 1999. At the same period there were growing concern among the meat and poultry consumers about the continuing incidents of food borne illness in the US. At least the increase in number of recall can be interpreted that the risk of consumers to be exposed to hazardous meat and poultry was reduced. It was understood, however, that not all of the recalls were always associated with health hazard situation such as incorrect labeling. If the seriousness of the reason for recall was classified, approximately 85% of them were Class I and only 15% of them were Class II. The presence of hazards or incorrect label in meat and poultry products can come to the attention of FSIS through firm's notification about the violation, FSIS routine sampling program, and customer or consumer complaints.

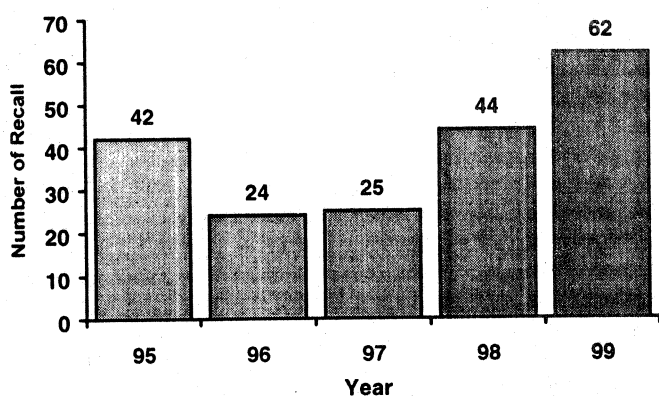


Figure 1. Number of Meat and Poultry Recall Reported to the FSIS from 1995-1999 (Total 197 Recalls)

The majority of the meat and poultry products were recalled due to the presence of pathogenic bacteria contamination (Table 1). This should not be understood that the firms failed to adhere with the good manufacturing practices and food safety principles during their production and distribution. Instead, it means that meat or poultry processing companies are improving their control and inspection system that allow them to detect any potential hazard in their product and to alert their customers or consumers as soon as possible should a hazardous or non-conforming product accidentally get into commerce.

Other reasons for recalls were presence of extraneous material contamination, under processing, incorrect labeling, and drug residues. When the data on pathogenic bacteria contamination was evaluated, the majority of the violative products were resulted from contamination of *Listeria monocytogenes*, followed by *E. coli* O157:H7, and *Salmonella* contamination (Table 2). This strongly suggests that these pathogens are posing significant and continuous threat to meat and poultry product manufacturers and their ultimate consumers. The firm's ability to detect any bacterial contamination is rapidly improving in term of speed and sensitivity. At the end the consumers will benefit from the availability of meat or poultry product with high food safety standard.

Table 1. Reason for recalling meat and poultry products

Reason for Recall	Number	Percentage
Pathogenic bacteria contamination	107	54
Spoilage organisms	2	1
Chemical	3	2
Drug	10	5
Heavy metal	1	1
Extraneous material	24	12
Virus	2	1
Labeling	18	9
Processing	19	10
Miscellaneous	11	5
<b>Total</b>	<b>197</b>	<b>100</b>

Table 2. Type of pathogenic bacteria contamination that results in meat and poultry product recalls 1995 – 1999

Name of bacteria	Number of Recall	Percentage
<i>Listeria monocytogenes</i>	59	55
<i>Salmonella</i>	13	12
<i>E. coli</i> O157:H7	35	33
<b>Total</b>	<b>107</b>	<b>100</b>

Among the foreign object that most frequently found in the meat and poultry products were plastics, followed by pieces of metal, bone fraction, pieces of glass, and grease contamination (Table 3). Although the presence of pieces of plastic or small bone fraction was rarely reported to cause fatality, the presence of these materials indicate poor control and monitoring. For some people, however, consuming meat or poultry products contaminated with pieces of metal or glass could result in a serious health problem.

Table 3. Type of extraneous material contamination that results in meat and poultry product recalls 1995 – 1999

Type of Extraneous material	Number of Recall	Percentage
Metal	6	27
Plastics	10	45
Glass	2	9
Bone	2	9
Grease	1	5
Can lining	1	5
<b>Total</b>	<b>22</b>	<b>100</b>

As a consequence of recall during the period of 1995 – 1999, a large quantity of contaminated meat and poultry products must be withdrawn from the market. The respective firms were held accountable to ensure that the unwholesome products will never be sold to customers. The largest quantity of recalled meat and poultry products were found in 1997 and 1998 in which 25 million pounds of ground beef and 35 million pounds of hot dog were withdrawn from commerce due to *E. coli* O157:H7 and *L. monocytogenes* contamination, respectively (Table 4). The proportion of the product recovered following recall was ranging from 1 – 100%. A 100% recovery means that all of the violative products were successfully withdrawn (Table 4). The most frequently recalled item was raw ground beef followed by beef franks and hot dogs, beef ham, beef patties, and boneless chicken.

Table 4. Volume of product subjected to recalled and percentage of the product recovered (selected major incidents)

Product	Total Produces (lbs.)	Percent Recovered	Reason for Recall	Year
Chicken soup	406,945	4	Plastic contamination	1995
Bologna	579,000	54	<i>Salmonella</i>	1995
Frozen beef patties	200,000	1	<i>E. coli</i> O157:H7	1995
Buffalo franks	260,000	100	<i>Listeria monocytogenes</i>	1995
Finely ground turkey	3,161,724	9	Bone	1995
Ground beef	469,056	97	<i>E. coli</i> O157:H7	1995
Beef jerky	360,000	96	<i>Listeria monocytogenes</i>	1996
Roast beef	720,000	99	<i>Listeria monocytogenes</i>	1996
Roast beef	487,000	94	<i>Listeria monocytogenes</i>	1996
Salami	507,000	92	<i>Listeria monocytogenes</i>	1996
Chicken wing	300,000	44	Metal	1997
Dry sausage	347,000	100	<i>Listeria monocytogenes</i>	1997
Ground beef	443,656	90	<i>E. coli</i> O157:H7	1997
Ground beef	25,000,000	40	<i>E. coli</i> O157:H7	1997
Beef patties	576,000	81	Spoilage organism	1997
Hot dog	35,000,000	17	<i>Listeria monocytogenes</i>	1998
Beef steak	2,700,000	72	<i>Salmonella</i>	1998
Ground beef	965,000	42	<i>E. coli</i> O157:H7	1998
Luncheon meats	900,000	36	<i>Listeria monocytogenes</i>	1999
Beef tips & gravy	563,600	34	Under processed	1999
Ground beef	500,000	8	<i>E. coli</i> O157:H7	1999

## CONCLUSION

Meat and poultry product manufacturers have positively responded voluntary recall program enforced by the USDA-FSIS. This was indicated by the fact that some of these firms were able to withdrawn more than 90% of their products. This shows that firms are doing their best to assure that defective or violative products will never have a chance to reach their consumers. This can be used as a valuable lesson for establishing and enforcing similar mechanism to ensure food safety in Indonesia.

## REFERENCES

Anonymous. 1995. 1995 Recall Cases. Recall information center, FSIS-USDA, Washington, D.C.

Anonymous. 1996. 1996 Recall Cases. Recall information center, FSIS-USDA, Washington, D.C.

Anonymous. 1997. 1997 Recall Cases. Recall information center, FSIS-USDA, Washington, D.C.

Anonymous. 1998. 1998 Recall Cases. Recall information center, FSIS-USDA, Washington, D.C.

Anonymous. 1999. 1999 Recall Cases. Recall information center, FSIS-USDA, Washington, D.C.

Anonymous. 2000a. Recall of meat and poultry products. FSIS Directive no. 8080.1, Rev. 3. FSIS-USDA, Washington, D.C.

Anonymous. 2000b. Food Recalls, Food Safety focus. FSIS-USDA, Washington, D.C.