

National Advisory Committee on Meat and Poultry Inspection
October 12-13, 2006

Using Risk in Slaughter Operations

This committee has been closely involved in FSIS' consideration of how to use risk to improve the effectiveness and the efficiency with which the Agency does inspection. The Agency is beginning its consideration of how to use risk in slaughter inspection, particularly poultry slaughter inspection. FSIS is looking at poultry slaughter because of the very low level of disease on poultry carcasses (See Attachments 1 and 2). Another factor that the Agency is considering is what was learned in the Hazard Analysis and Critical Control Point (HACCP) Inspection Models Project (HIMP). (See Attachment 3 for a comparison of *Salmonella* results for HIMP and traditional plants.) The Agency will also carefully consider the public input that it receives as well as any other available information. This presentation initiates the Agency's efforts to obtain public input on risk-based slaughter inspection systems. We ask that you step back to a high level and address the questions at the end of this paper. To help you do so, we will take you back to some of the basic factors that we presented to you last November and ask that you consider those factors specifically in the slaughter context.

1. Purpose of inspection at slaughter

Traditionally, inspection at slaughter has been designed to ensure that products are produced under sanitary conditions, that products do not have any visible defects or disease that would render them injurious to consumers, and that they do not have any visible defects that would cause consumers to reject them. Thus, the Poultry Products Inspection Act, as well as the Meat Inspection Act, requires that our inspectors make a critical appraisal of each carcass.

While a visual appraisal continues to be important, we know that there is more that needs to go into slaughter inspection than a check of each carcass for defects if risks are to be dealt with effectively. For example, pathogens are not visible on carcasses, but the Agency's approach to inspection must address them, or products that could be injurious to health could flow freely into commerce. One of FSIS' major focuses is thus on verifying that plants control the presence of pathogens, particularly *Salmonella*, on carcasses, as evidenced by the Agency's *Salmonella* initiative that it instituted in February of this year. Pathogen control will continue to be a major focus in any risk-based slaughter inspection program that the Agency institutes.

Moreover, the slaughter process is not static throughout the day or from day to day. For example, in poultry slaughter, birds vary from flock to flock and even within a flock. Equipment may malfunction or need maintenance, and there may be other changes during the course of the day as well. Thus, if an establishment is

to produce safe and wholesome product, it must ensure that its process is consistently under control, and FSIS, for its part, must be able to verify that that control is maintained.

2. Agency deployment of resources in poultry slaughter

The Agency needs to position and use its inspection personnel so that they are able to ensure that the purposes of the inspection are achieved. In the current system, FSIS has on-line personnel who examine each carcass and off-line personnel who verify the zero tolerance for fecal material and the Critical Control Points designated by the plant. Inspection program personnel need to be able to ensure that product that receives the mark of inspection is safe, is wholesome, and is not adulterated. FSIS has become concerned that, given the range of potential hazards at slaughter, it is necessary to deploy Agency inspection personnel so that they can focus on minimizing the risk posed by those hazards and not solely on the condition of each carcass. For example, inspection program personnel at slaughter may need to consider some of the factors that we discussed at this Committee's last meeting as affecting our processing inspection — the hazards posed by the species and the type of process, the significance of those hazards and how well the plant controls those hazards in its process.

3. Tasks performed by inspection program personnel

FSIS' traditional model in slaughter operations, particularly poultry operations, is to expend the great majority of its resources having its inspection program personnel examining each carcass for a range of defects, some food safety related, some not. FSIS has come to believe, however, that if slaughter inspection is to be risk-based, Agency inspection program personnel need to spend at least as much time verifying that the plant's process is under control as they do inspecting carcasses. Through in-plant observations, assessment of plant records, and assessment of data from plant and Agency testing, as well as from examining carcasses, Agency inspection program personnel will be able to verify whether the establishment is maintaining process control.

4. Response to inspectional findings

Under FSIS' current slaughter inspection system, inspection program personnel primarily see problems on a carcass-by-carcass basis. If the Agency were to move to a system more oriented to process control, inspection program personnel would be able to identify and respond to an emerging problem in the process more quickly. If they observed indications of a loss of control, they would be able to respond in more flexible ways than if they are focused only on acting to condemn carcasses or to stop the line.

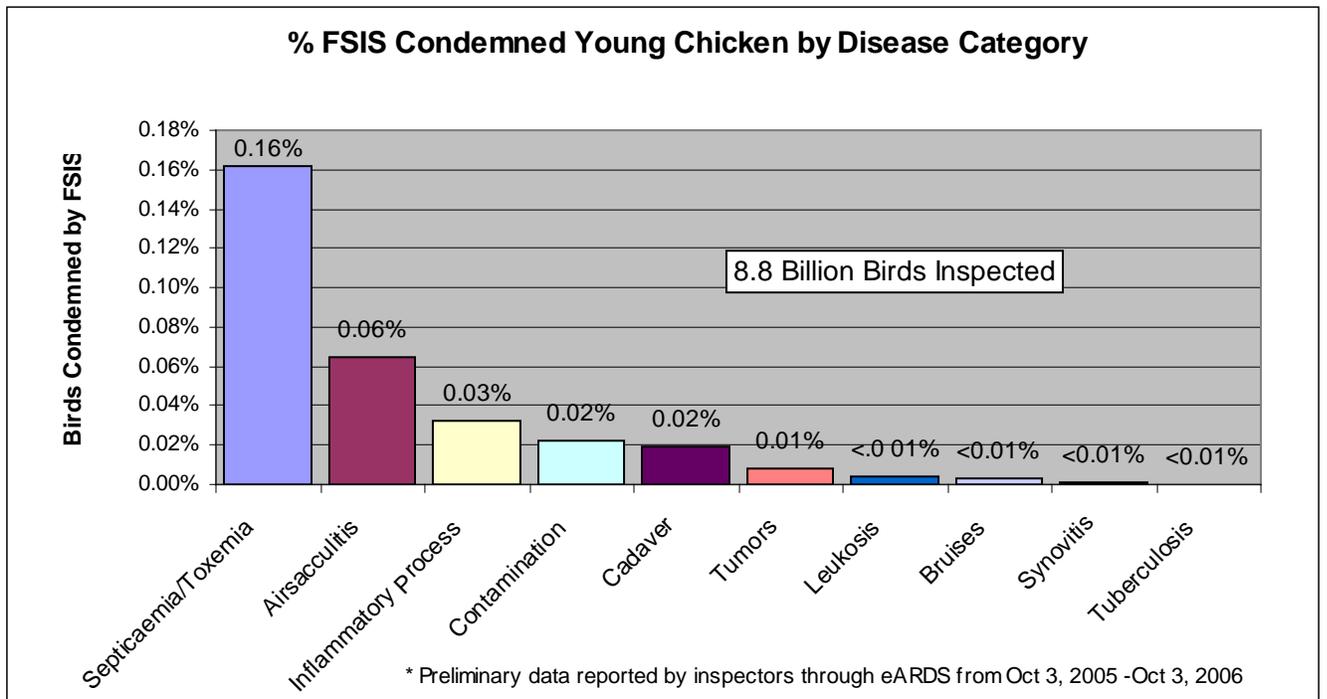
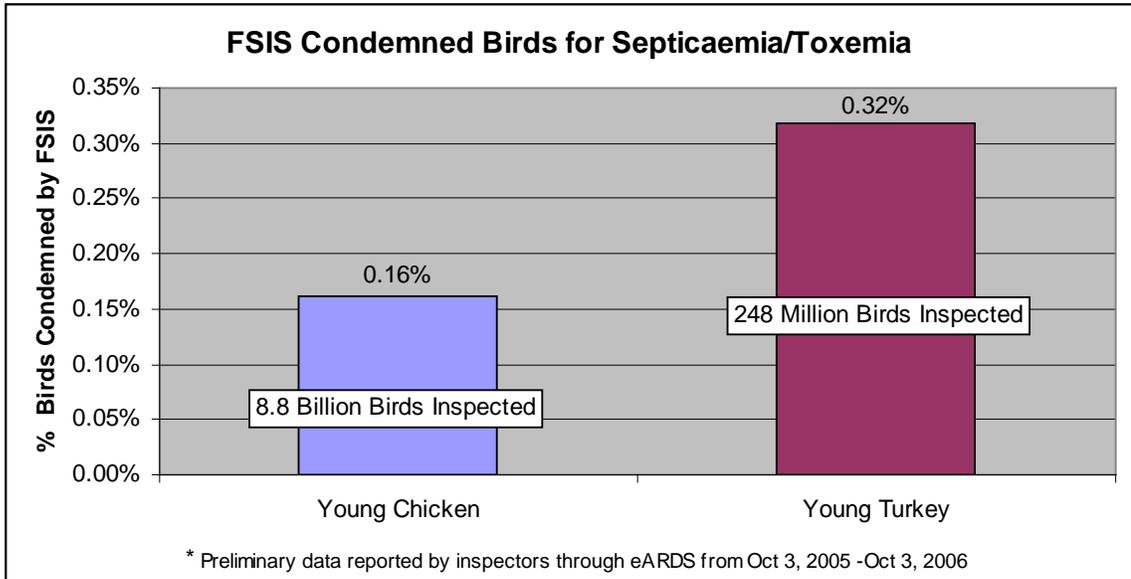
Questions

- a. Are there other purposes for inspection than those that are identified in the first section of this paper? How do those purposes bear on consideration of risk at slaughter?
- b. What comments do you have about using the factors listed at the end of the second section of this paper to guide how FSIS deploys its resources in slaughter operations?
- c. What comments do you have on FSIS inspection program personnel performing the types of inspection tasks that are outlined in this paper? What comments do you have on emphasizing process control as a means of identifying and addressing emerging risks?

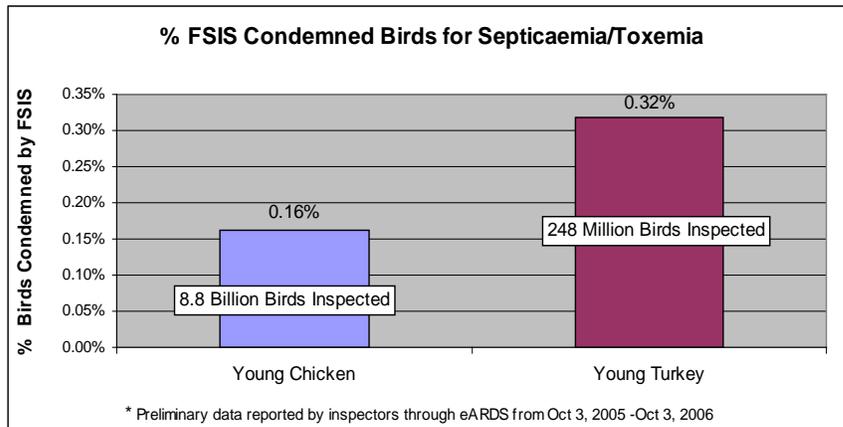
Contact

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Attachment 1



Attachment 2



Attachment 3***Salmonella* HACCP Data Traditional versus HIMP Plants**

The percentage of positive *Salmonella* samples is based on all 'A' set samples collected during the indicated year, with no consideration given as to whether a sample is part of a complete or incomplete set.

As only large and small broiler establishments are currently participating in HIMP, results from these establishments are included in a separate column for comparison.

<i>Salmonella</i> HACCP Data Traditional versus HIMP, A Sets				
Year		Traditional (all plants minus HIMP)	HIMP	Total
2000	Total Samples	9550	507	10,057
	% Positive	9.3	5.3	9.1
2001	Total Samples	7905	1,050	8,955
	% Positive	12.4	9.2	11.9
2002	Total Samples	8365	818	9,183
	% Positive	11.9	7.2	11.5
2003	Total Samples	5755	713	6,468
	% Positive	12.9	11.6	12.8
2004	Total Samples	6390	682	7,072
	% Positive	13.8	11.0	13.5
2005	Total Samples	8388	1,204	9,592
	% Positive	15.9	10.8	16.3
*2006	Total Samples	1890	275	2165
	% Positive	11.2	9.5	11.0
<i>*Includes Jan-Jun 2006</i>				