United States Department of Agriculture Food Safety and Inspection Service



Public Health-Related Performance Standards Currently Under Consideration for Young Chickens

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Performance Standards Currently Under Consideration

- FSIS is considering proposing a number of performance standards directly or indirectly related to public health
 - Salmonella
 - Campylobacter
 - Zero Tolerance for Fecal Contamination
 - Septicemic and Toxemic Animal Diseases
 - Generic E. coli
- In addition, FSIS is considering other consumer protection performance standards (not focus of this presentation)
 - Standards of Identity
 - Non-Septicemic/ Non-Toxemic Animal Disease



Salmonella

- Salmonella performance standard is directly related to public health
- Previous Salmonella performance standard
 - established relative to national estimates of Salmonella contamination prevalence from nationwide baseline study
 - expressed in terms of maximum number of Salmonella-positive samples per set
- FSIS considering requiring on-going establishment testing for *Salmonella*
- FSIS will reevaluate performance standard when data are available from young chicken baseline currently underway
 - if baseline not completed by time of publication of proposed rule, FSIS currently plans to either insert preliminary data or state that the actual values will be "to be determined"

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Salmonella

- FSIS expects to propose to continue to segregate performance into three categories:
 - those below half the acceptable number of pathogens in the set;
 - those at or above half but less than exceeding; and
 - those that exceed
- Frequency of testing by establishment likely will depend upon which category establishment falls within based on their data and FSIS data
- FSIS also is contemplating requiring more frequent testing by establishment when it exceeds a "to be determined" threshold for sample sets that contain a high level of serotypes that are common causes of human illness (e.g., in the CDC top 30 list)
- FSIS is considering ways to obtain and use information on subtyping under conditions in which the pathogens are not well controlled (e.g., Category 2 and 3)

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Campylobacter

- *Campylobacter* performance standard is directly related to public health
- The performance standard is expected to be established using data from young chicken baseline currently underway
 - incidence and levels of *Campylobacter* are being measured in that baseline
 - if baseline is not completed by time of the publication of proposed rule, FSIS currently plans to either insert preliminary data or state that the actual values will be "to be determined"
- FSIS considering requiring on-going establishment testing for *Campylobacter*
- FSIS expects to propose a quantitative performance standard for *Campylobacter*, not based on presence or absence



Campylobacter

- FSIS expects to propose to segregate performance into three categories
 - those below half the acceptable number of pathogens in the set;
 - those at or above half but less than exceeding;
 - and those that exceed
- Frequency of testing by establishment likely will depend upon which category establishment falls within based on their data and FSIS data
- FSIS is considering ways to obtain and use information on subtyping under conditions in which the pathogens are not well controlled (e.g., Category 2 and 3)



Zero Tolerance for Fecal Contamination

- Fecal contamination is major vehicle for spreading pathogenic microorganisms; performance standard is directly related to public health
- Current regulations state "Poultry carcasses contaminated with visible fecal material shall be prevented from entering the chilling tank" [§ 381.65(e)]
- Agency currently plans to propose continuing the performance standard that there be no visible fecal matter on young chicken carcasses before they enter the chilling tank.



Septicemic and Toxemic Animal Diseases

- Septicemic/toxemic poultry carcasses are of public-health concern
 - likely to contain infectious agents (bacteria, virus, richettsia, fungus, protozoa, or helminth organisms) that could be transmitted to humans.
- Under current regulations, FSIS inspection program personnel are responsible for condemning all septicemic/toxemic poultry carcasses (§ 381.83).
- Consistent with current regulations, FSIS is considering proposing that establishments operating under the new system meet a performance standard for zero septicemic or toxemic poultry carcasses before the chilling tank



Generic E. coli

- Generic *E. coli* are enteric bacteria found in intestines of animals, associated with fecal material
- Presence of generic *E. coli* at high levels indicates presence of intestinal material, or filth, and, and thus is used as a measure of sanitation; indirectly related to public health
- Presence (above some specific levels) at end of chilling process or end of slaughter line could indicate efficiency of microbial process controls
- Under current regulations, establishments that slaughter poultry must sample whole carcasses and test for generic *E. coli* at the end of chilling process or, if that is impractical, at end of slaughter line
- Analyses of data from ARS study indicates that log reduction of generic *E. coli* is correlated to log reduction of *Salmonella* and log reduction of *Campylobacter*



Generic *E. coli*

- FSIS considering having new performance standards for generic *E. coli*, reflecting sanitary conditions:
 - require on-going establishment testing for generic *E. coli* at two points in process: at rehang (post-pick) and at post-chill
 - specify performance standards for measured levels of *E. coli* at these two locations, and reduction of levels (on the logarithmic scale) between rehang and post-chill
- Incidence and levels of generic *E. coli* at rehang and post-chill being measured in FSIS baseline study in young chickens; analyses, including a risk assessment, will be conducted to ensure that distributions and correlations seen in ARS study are consistent.
- Performance standard would be established using data from that baseline
 - if baseline is not completed by time of publication of proposed rule, FSIS currently plans to either insert preliminary data or state that the actual values will be "to be determined"
- FSIS expects to propose to segregate performance into three categories:
 - those below half the acceptable number of pathogens in the set;
 - those at or above half but less than exceeding; and
 - those that exceed
- Frequency of testing by establishment likely will depend upon which category establishment falls within based on their data and FSIS data
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