



***E. Coli* Checklist for Beef Operations**

***E. coli* O157:H7 - Addressing the Challenges,
Moving Forward With Solutions**

April 9, 2008

Washington, D.C.

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Outline

- **Background**
- **Methodology**
- **Selected Results**
 - **Response Rates**
 - **Results – Attachment 3**
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- **Next Steps**



Background

- **Events leading to Issuance of FSIS Notice 65-07**
(“Notice of Reassessment for Escherichia coli O157:H7 Control and Completion of a Checklist for All Beef Operations”):
 - **Adverse trend in percent positive rate of *Escherichia coli* (*E. coli*) O157:H7 in FSIS verification testing**
 - **Unusual number of positive samples for *Escherichia coli* O157:H7 in a short span of time (19 establishments in CY2007)**
 - **Positive samples or recalls associated with *E. coli* O157:H7 related to certain source materials used in ground beef**



Beef operations subject to the Checklist under Notice 65-07

- Slaughter**
- Trim fabrication**
- Enhanced Product**
- Mechanical tenderization**
- Grinding**
- Regrind**
- Patty Forming**



Methodology

- **Collect data via questionnaires included as attachments to Notice 65-07**
 - Questions were completed by inspection personnel
- **Analyze responses from questionnaires**
- **Report on findings**
- **Use results to inform agency policies and future initiatives to prevent *E. coli* O157:H7 related-events**



Data Collection

- **Notice 65-07 instructed FSIS inspection personnel to:**
 - **Attachment 3**
 - **Meet and discuss with industry need to reassess HACCP, Sanitation SOPs, and other prerequisite plans**
 - **Complete Attachment 3**
 - **5 questions on HACCP reassessment and resulting status of HACCP, Sanitation SOPs and other prerequisite programs**
 - **Attachment 5:**
 - **Complete Checklist of up to 118 questions to capture production specific information on beef establishments, including best practices/control measures**
 - **Share Checklist with establishment management and provide opportunity for substantiated changes**
 - **Front Line Supervisor reviewed Checklist for completeness**



Selected Results



Response Rates

For relevant beef operations in business at the time and subject to inspection under Notice 65-07:

- **Attachment 3, HACCP Plan Reassessment, represents approx. 85% of plants**
 - 2,002 unique questionnaires were received
- **Attachment 5, Checklist, represents approximately 90% of plants**
 - 2,322 unique questionnaires were received



Results of Attachment 3 – HACCP Plan Reassessment



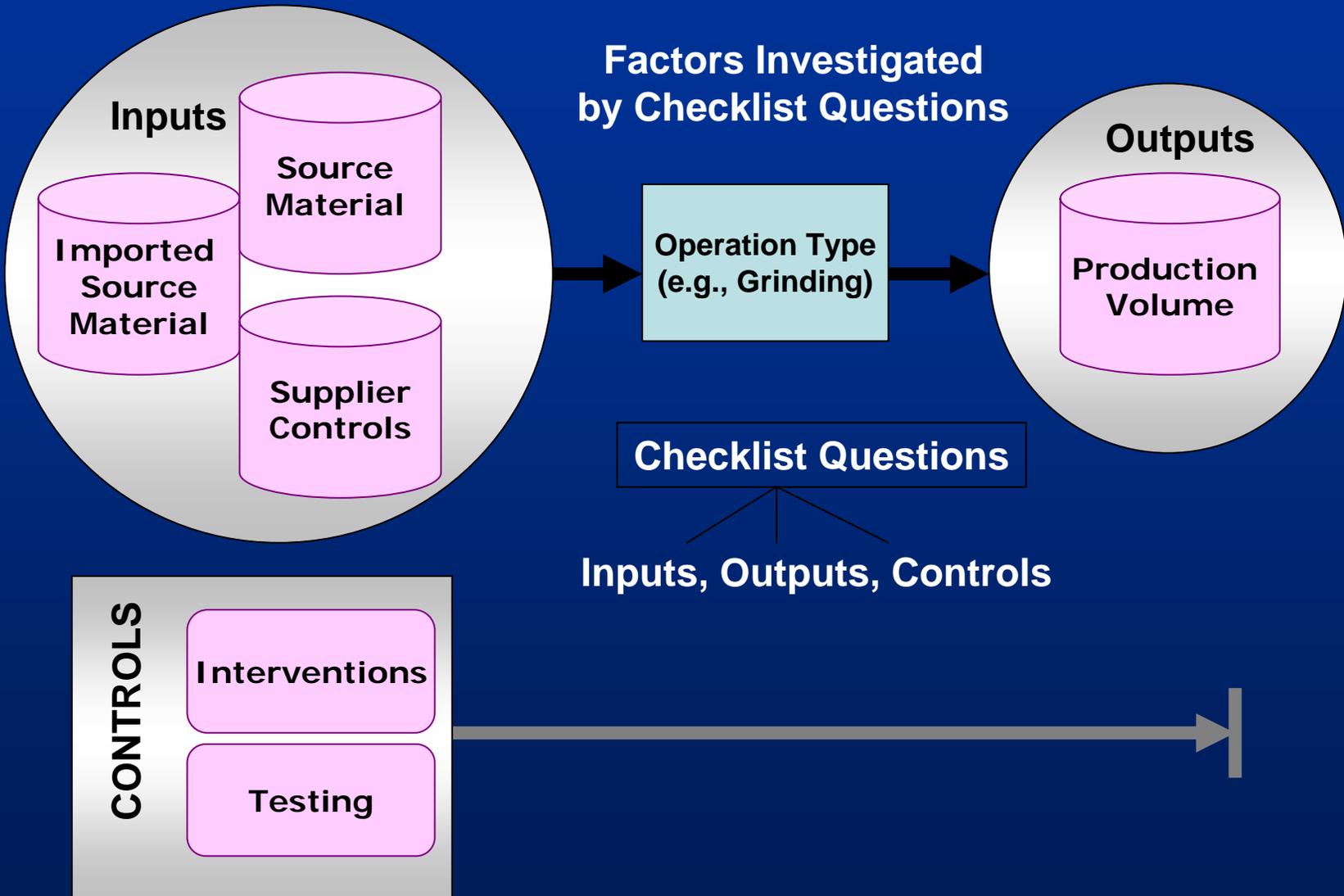
Results for Attachment 3 (Total # of Respondents= 2,002)

% of Total Respondents	Description
96%	Reassessed HACCP plans due to adverse <i>E. coli</i> O157:H7 trends
33%	Changed HACCP plans as result of reassessment
15%	Changed Sanitation SOP(s) as result of reassessment
35%	Changed other prerequisite programs as result of reassessment
52%	Changed one of the following: HACCP Plan, Sanitation SOP, or other prerequisite program

Note: Reasons for respondent actions still under analysis



Results of Attachment 5 – Checklist



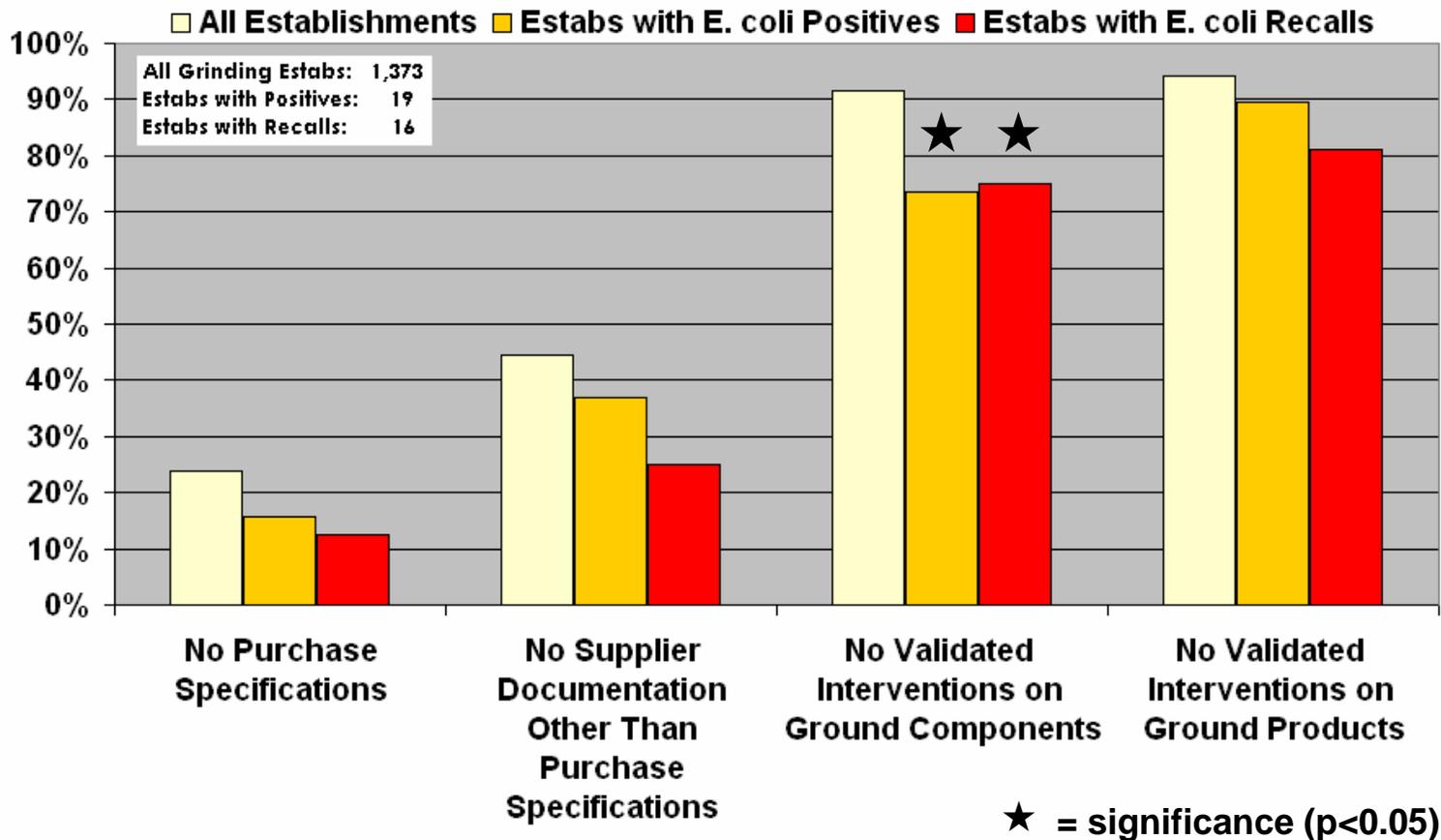


Focus of Today's Analysis

- **Comparison of practices for all establishments vs. those for establishments with CY2007 recall and *E. coli* O157:H7 positives**
- **Review of question responses related to the use of ground beef components used in beef operations, specifically grinding**
- **Analysis of all Checklist questions will be included in Final FSIS *E. Coli* O157:H7 Checklist Analysis Report (July 2008)**



Status of Grinders Best Practices in Relation to *E. coli* O157:H7 Positives and Recalls (2007)



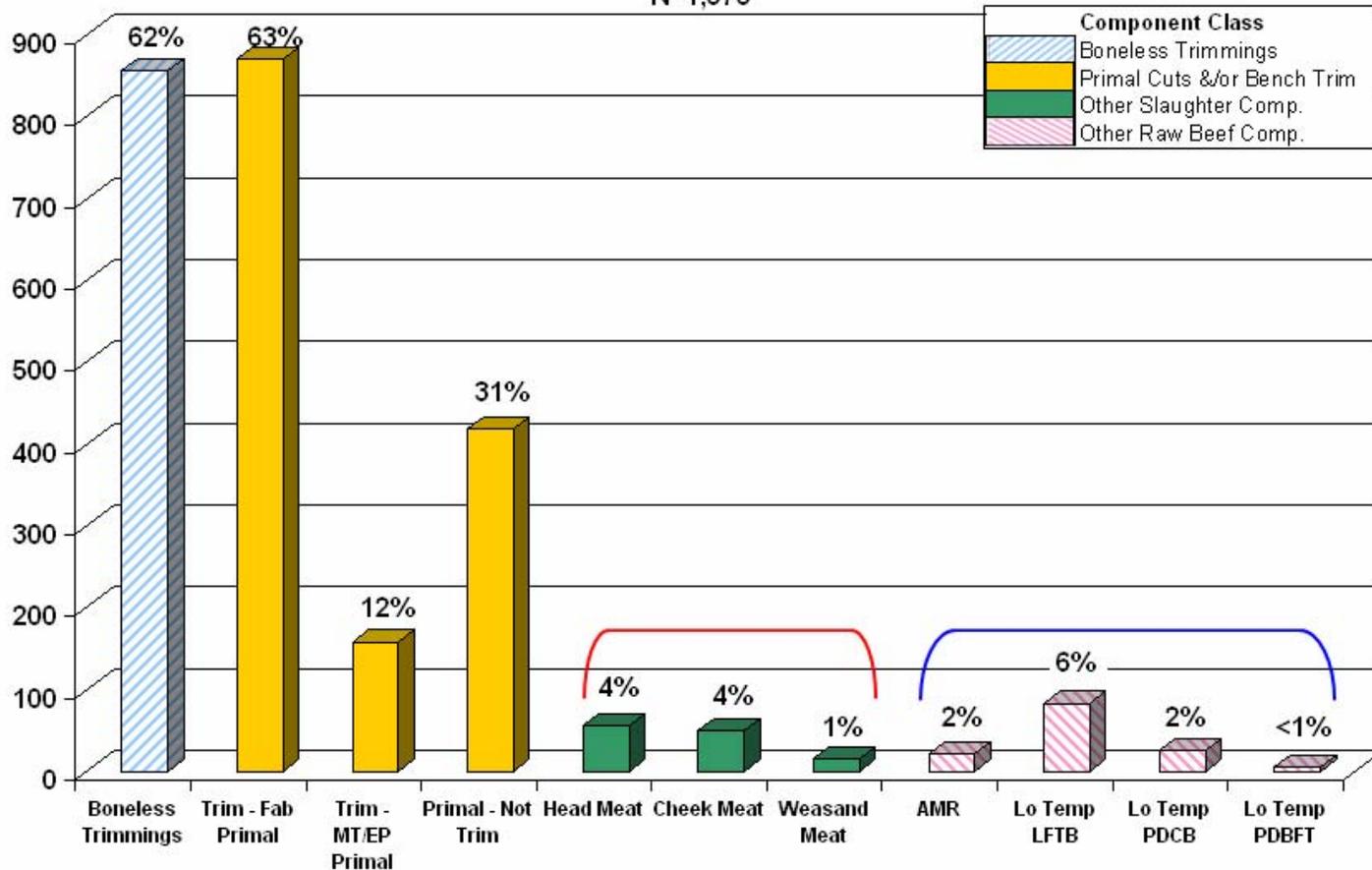


Selected Results of Ground Beef Component Analysis



Raw Ground Beef Components Used by Grinding Operations

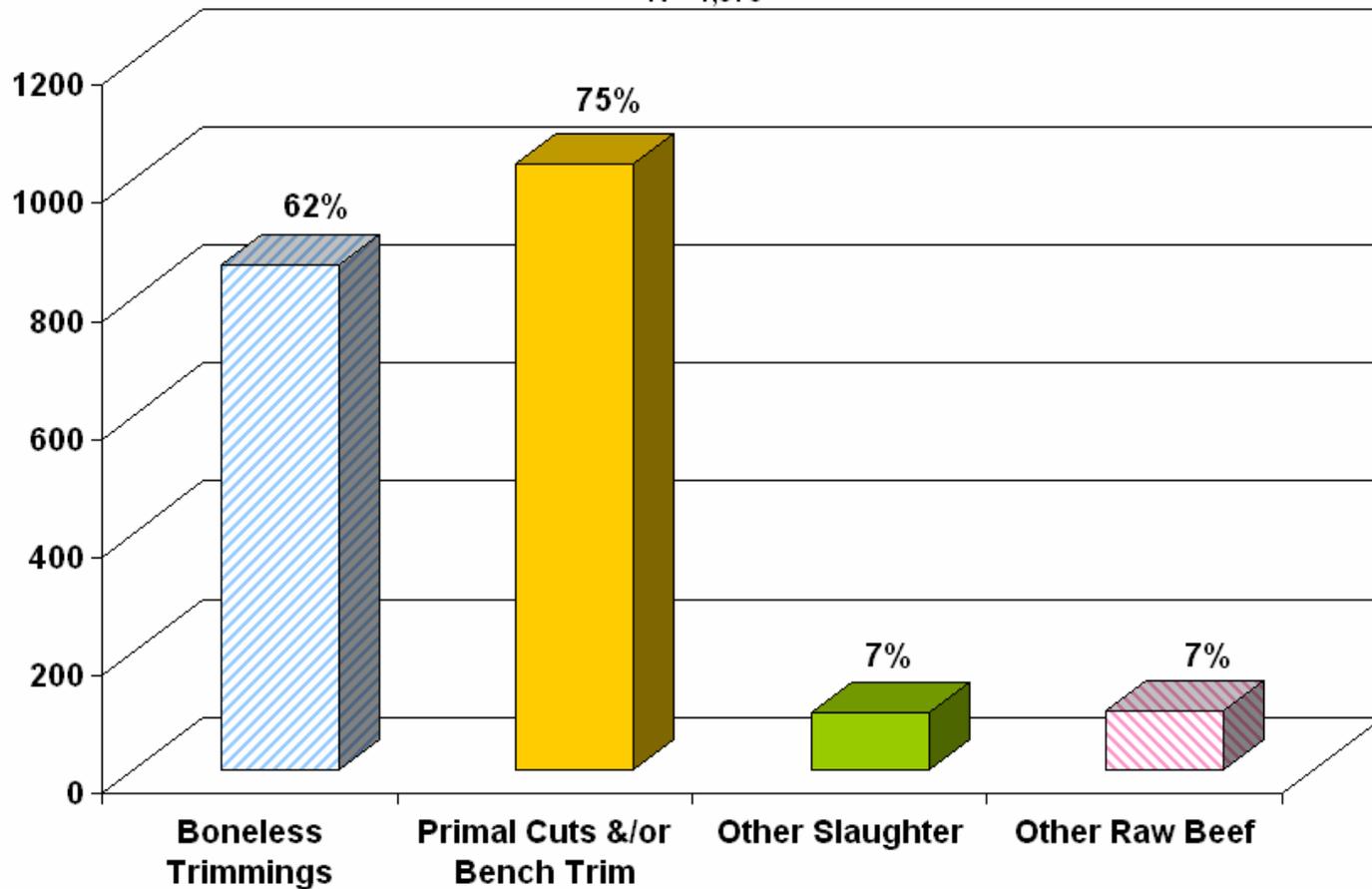
N=1,373





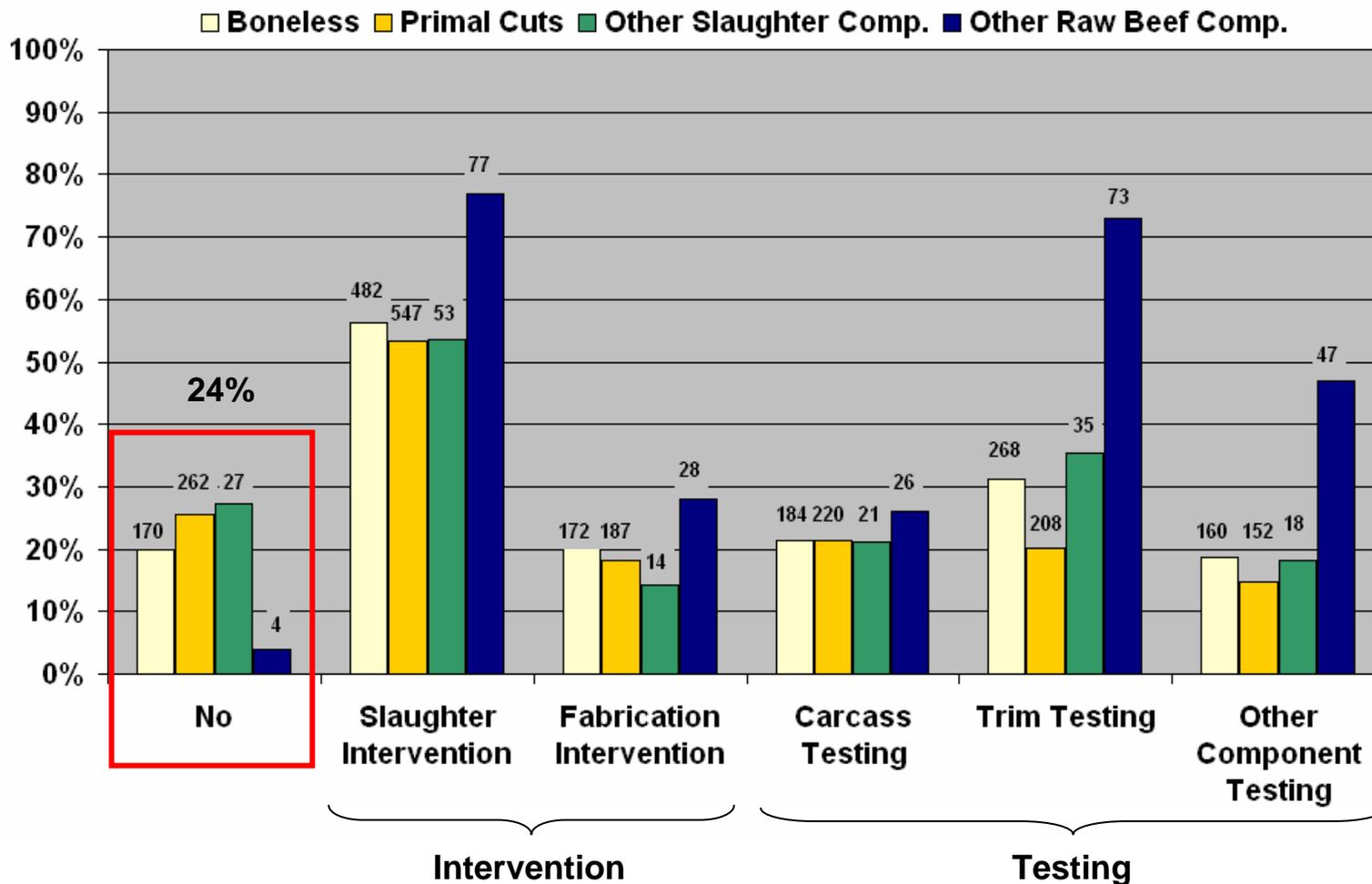
Number of Grinding Operation Establishments by Component Class

N = 1,373





Grinder's Purchase Specification Requirements by Component Class





Summary

- **Grinding establishments with CY2007 *E. coli* O157:H7 positives and/or recalls currently require purchase specifications of suppliers at a higher rate than other establishments.**
- **The use of trim fabrication from fabricated, mechanically tenderized, or enhanced primal/sub-primal cuts is employed by 12% to 64% of beef grinding operations.**
- **More operations use primal/sub-primal cuts than other component types.**
- **24% of beef grinding operations have no purchase specification requirements.**
 - **25% of operations using primal/sub-primal &/or bench trim have no purchase specification requirements.**
- **Operations using head, cheek and weasand meats do not have a higher rate of supplier purchase specification requirements.**
- **Operations using AMR and low temperature rendered materials do have a higher rate of supplier purchase specification requirements.**



Next Steps

- **Prepare final report of all results (July 2008), including additional analysis on:**
 - Responses to food safety system questions (best practices) in beef operations by HACCP size (Large, Small, Very Small)
 - Further analysis of beef component types including head, cheek, and weasand meat
 - Further analysis of establishments with *E. coli* O157:H7 positives and recalls
- **Evaluate practices in place at time of recall (from FSAs) for 2007 establishments as compared with current practices (from Checklist)**
- **Based on analysis and evaluation of questionnaire:**
 - Develop revised *E. coli* O157:H7 checklist
 - Determine if revised questionnaire should be administered to all or targeted establishments
- **Use results to inform agency policies and future initiatives to prevent *E. coli* O157:H7 related-events**