Consumer Federation of America

May 3, 2017

Alfred V. Almanza
Administrator
Food Safety and Inspection Service
U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, DC 20250

RE: FSIS Compliance Guideline for Minimizing the Risk of Shiga Toxin-Producing Escherichia coli (STEC) and Salmonella in Beef (including Veal) Slaughter Operations (FSIS-2017-0012)

Dear Administrator Almanza:

Consumer Federation of America (CFA)and the Center for Foodborne Illness Research & Prevention (CFI) appreciate the opportunity to submit these comments on the Food Safety and Inspection Service (FSIS) Compliance Guideline for Minimizing the Risk of Shiga Toxin-Producing *Escherichia coli* (STEC) and *Salmonella* in Beef (including Veal) Slaughter Operations. This guidance will help to reduce STEC and *Salmonella* contamination in beef products. The guidance would contribute even further to reducing foodborne illness with greater explanation of the heightened STEC risks associated with veal calves, and clarification that processors that do not remove lymphatic tissue from beef products are in violation of the law.

This guidance is long overdue. In January of 2013, USDA's National Advisory Committee on Meat and Poultry Inspection (NACMPI) issued a report that examined the risk-profiles of various cattle subgroups, with particular emphasis on veal categories.[1] Recent research shows that

[1] Subcommittee on Strengthening Verification of Sanitary Dressing and Antimicrobial Interventions for Veal Slaughter. National Advisory Committee on Meat and Poultry Inspection. Report and Recommendations. January 16-17, 2013. https://www.fsis.usda.gov/wps/wcm/connect/4b3e7d9f-438d-4dfb-9889-c1777621bb3a/NACMPI_Veal_Slaughter_Recommendations_011713.pdf?MOD=AJPERES. Accessed 02 May 2017.

veal calves have a higher shedding rate for *E. coli* STECs.[2] In its January 2013 report, NACMPI acknowledged the heightened STEC risk associated with veal and recommended that USDA gather veal pre-harvest and slaughter data to identify best practices for minimizing STEC risks in veal production. In the meantime, NACMPI recommended that FSIS revise its FSIS Directive 6410.1 to include veal specific language and visual materials, along with small and very small outreach initiatives to inform veal producers and manufacturers about the challenges associated with their products.

The guidance responds, in part, to the NACMPI recommendations. However, it largely omits "veal specific" language. Recently, on March 3, 2017, FSIS recalled over 400,000 pounds of boneless veal that was potentially contaminated with *E. coli* O103,[4] which is one of the six STECs identified as an adulterant in beef. In December 2016, another boneless veal recall involved 4,600 pounds of product potentially contaminated with *E. coli* O26 and O45,[5] two other STEC adulterants for beef. These recalls highlight the heightened STEC risk associated with veal and support the inclusion of a special emphasis on veal in the guidance. By citing specific examples and research studies to document the increased challenges related to STEC shedding in young calves, the guidance could better communicate the need for pre-harvest, transport and slaughter controls to lower the risk of STEC contamination resulting from young calves, even if these measures are largely the same as those that apply to other cattle subgroups.

Another important area in controlling STEC contamination in cattle slaughter is during hide removal. While CFA and CFI generally agree with the new guidance "Best Practices" for de-hiding operations, we are concerned that there is no mention about the problems associated with mechanical de-hiding equipment called "up-pullers." According to FSIS's 2001 risk assessment on Escherichia *coli* O157:H7, up-pullers are "more likely to cause aerosol contamination because the hide is being rolled up over the carcass," [6] thereby making contamination more likely. Given the importance of the de-hiding process, we recommend that the de-hiding "Best Practices" include a statement about the additional risk posed by up-puller equipment.

In addition to STECs, this guidance outlines effective procedures for minimizing *Salmonella*. Toward that end, it affirms a longstanding definition of "meat" from cattle as excluding tissue that does not "normally accompany the muscle tissue," including tissue from the six peripheral or "major" lymph nodes.[10] Compliance with this definition has increased in importance as new research

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[2] *See*: Cho S, Fossler C, Diez-Gonzalez F, et al. Cattle-level risk factors associated with fecal shedding of Shiga toxin-encoding bacteria on dairy farms, Minnesota, USA. *Can J Vet Res*. April. Vol. 73(2) (2009). *And:* Mir R, Weppelmann T, Elzo M, et al. Colonization of Beef Cattle by Shiga Toxin-Producing *Escherichia coli* during the First Year of Life: A Cohort Study. PLoS ONE 11(2): e0148518 (2016).

[4] USDA. Ohio Farms Packing Co. Ltd. Recalls Veal Products Due To Possible *E. Coli* O103 Contamination. Press release. (2017). https://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/recall-case-archive/archive/2017/recall-020-2017-release. Accessed 02 May 2017.

[5] USDA. Gold Medal Packing Inc. Recalls Veal Products Due To Possible *E. Coli* O26 and O45 Contamination. Press release. (2016). https://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/recall-case-archive/archive/2016/recall-121-2016-release. Accessed 02 May 2017.

[6] USDA-FSIS. Risk Assessment of the Public Health Impact of Escherichia coli O157:H7 in Ground Beef. (2001) https://www.fsis.usda.gov/OPPDE/rdad/FRPubs/00-023N/00-023NReport.pdf. Accessed 02 May 2017.

[10] 9 C.F.R. 301.2.

has shown that lymphatic tissue harbors high concentrations of *Salmonella* bacteria.[11] FSIS should follow up on the clarification provided in this guidance with targeted enforcement to ensure that processors do not continue to mix highly pathogenic lymphatic tissue into beef products.

FSIS must do more to protect consumers from *Salmonella* in beef. According to recent CDC estimates, beef is the fourth most common cause of salmonellosis outbreaks.[12] FSIS should declare the antibiotic resistant *Salmonella* strains that cause these outbreaks to be adulterants, just as it declared the six strains of shiga-toxin producing *E. coli* to be adulterants in 2011.[13]

FSIS should also issue updated performance standards for *Salmonella* in ground beef. The *Salmonella* performance standard for ground beef is currently 7.5%. This standard was set in 1996, based on the industry average estimated from baseline studies going back even further. At the time it introduced the standard, FSIS claimed the system would spur continuous improvement because new baseline studies would be performed regularly and the standard would be adjusted to reflect the industry's increasing capacity to control contamination and pathogens. Over twenty years later, however, no new performance standards have been developed.[14] The lengthy delay in developing new performance standards has resulted in numerous missed opportunities to reduce pathogen contamination in raw ground beef products, meaning that consumers have continued to remain at risk of illness from *Salmonella*.

Within this regulatory environment, enforcing regulations requiring the separation of meat from byproduct, and particularly lymphatic tissue, assumes a vital food safety role. As the guidance notes, FSIS has traditionally recognized an exception to the rule barring lymph nodes from meat products for "beef patties" where the ingredients statement disclose that the patties contain byproduct. The guidance does not make clear whether this exception will continue to apply. In light of the food safety risks that recent research has brought to light, however, we urge FSIS to eliminate the exception, or as a second best alternative, to require additional disclosure, such as an asterisk on

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[11] *See, e.g.* Gragg et al. "Substantial within-Animal Diversity of *Salmonella* Isolates from Lymph Nodes, Feces, and Hides of Cattle at Slaughter." *Appl. Environ. Microbiol*. Vol. 79 no. 15 4744-4750 (August 2013); Haneklaus et al. "*Salmonella* prevalence in bovine lymph nodes differs among feedyards." *J. Food Prot.* 75:1131–1133 (2012); Koohmaraie et al. "Tracking the sources of *Salmonella* in ground beef produced from nonfed cattle." *J. Food Prot.* 75:1464–1468 (2012); Arthur et al. "Prevalence and characterization of *Salmonella* in bovine lymph nodes potentially destined for use in ground beef." *J. Food Prot.* 71:1685–1688 (2008).

[12] *See* James Andrews. "CDC Shares Data on *E. Coli* and *Salmonella* in Beef" *Food Safety News* (Oct. 29, 2014), http://www.foodsafetynews.com/2014/10/cdc-shares-mass-of-data-on-e-coli-and-salmonella-in-beef/#.WQddc_krKUk . Accessed 02 May 2017. ("The takeaway here [according to CDC researchers] is that outbreaks of antibiotic-resistant *Salmonella* in ground beef appear to be a growing problem," and "More needs to be done with *Salmonella* and beef.").

[13] *See* Center for Science in the Public Interest Citizen Petition for an Interpretive Rule Declaring Antibiotic-Resistant *Salmonella* Heidelberg, *Salmonella* Hadar, *Salmonella* Newport, and *Salmonella* Typhimurium in Meat and Poultry to be Adulterants (Oct. 1, 2014), https://cspinet.org/sites/default/files/attachment/oct-14-abr-petition.pdf. Accessed 02 May 2017.

[14] In 2013, the agency announced new testing that it would use to update the performance standard for *Salmonella* in ground beef. In 2014, it indicated that it would "develop and propose the new standard" during the 2015 "fiscal year." *See* FSIS "Changes to the *Salmonella* Verification Sampling Program: Analysis of Raw Beef for Shiga Toxin-Producing *Escherichia coli* and *Salmonella*" 78 *Fed. Reg.* 53019 (Aug.28, 2013); FSIS. "Changes to *Salmonella* Verification Sampling Program: Analysis of Raw Beef for Shiga Toxin-Producing *Escherichia coli* and *Salmonella*" 79 *Fed. Reg.* 32436 (June 5, 2014) ("FSIS intends to develop and propose the new standard next fiscal year.").

the statement ingredients linked to the statement: "Beef byproducts have been shown to contain high levels of pathogenic *Salmonella*. Cook thoroughly."

Given the length of time between revisions of important guidance documents, CFA and CFI encourage FSIS to make the 2017 Compliance Guideline for Minimizing the Risk of Shiga Toxin-Producing *Escherichia coli* (STEC) and *Salmonella* in Beef (including Veal) Slaughter Operations as specific as possible. For optimum reductions of STEC and *Salmonella* contamination events, FSIS needs to include more background information about the known risks, and provide, when appropriate, recommendations to mitigate those risks.

Thank you for considering these comments.

Sincerely,

Thomas Gremillion
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Consumer Federation of America

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