

Observed Sanitary Dressing Deficiencies and Ineffective Application of Interventions at Veal Slaughter Establishments

FSIS conducted a review of Food Safety Assessments (FSAs) and onsite visits to identify concerns unique to veal slaughter. The results of the review indicated that many veal slaughter establishments have not implemented sanitary dressing and process control procedures sufficient to prevent carcass contamination and the creation of insanitary conditions.

This attachment includes examples of sanitary dressing deficiencies and ineffective application of interventions that FSIS observed repeatedly during on-site visits. IPP are to use this information in conjunction with the inspection methodology in [FSIS PHIS Directive 6410.1](#) to assist them while verifying sanitary dressing in veal slaughter establishments. The attachment includes the relevant section (slaughter process step) in [FSIS PHIS Directive 6410.1](#) to facilitate this process.

Sticking

In this photo, we see that the establishment uses a large cut to bleed the calf, and that ingesta is leaking from the esophagus during bleeding (yellow arrow). FSIS observed employees cutting through the weasand (esophagus) during sticking. This practice resulted in ingesta contaminating the carcass and head. FSIS also observed employees removing the head without closing the weasand. FSIS recommends that the establishment use the smallest cut possible to accomplish bleeding and not to cut the weasand during sticking and bleeding. FSIS recommends that establishments close the weasand after rodding prior to head removal.

Photo 1 Cutting through the weasand (esophagus) during sticking



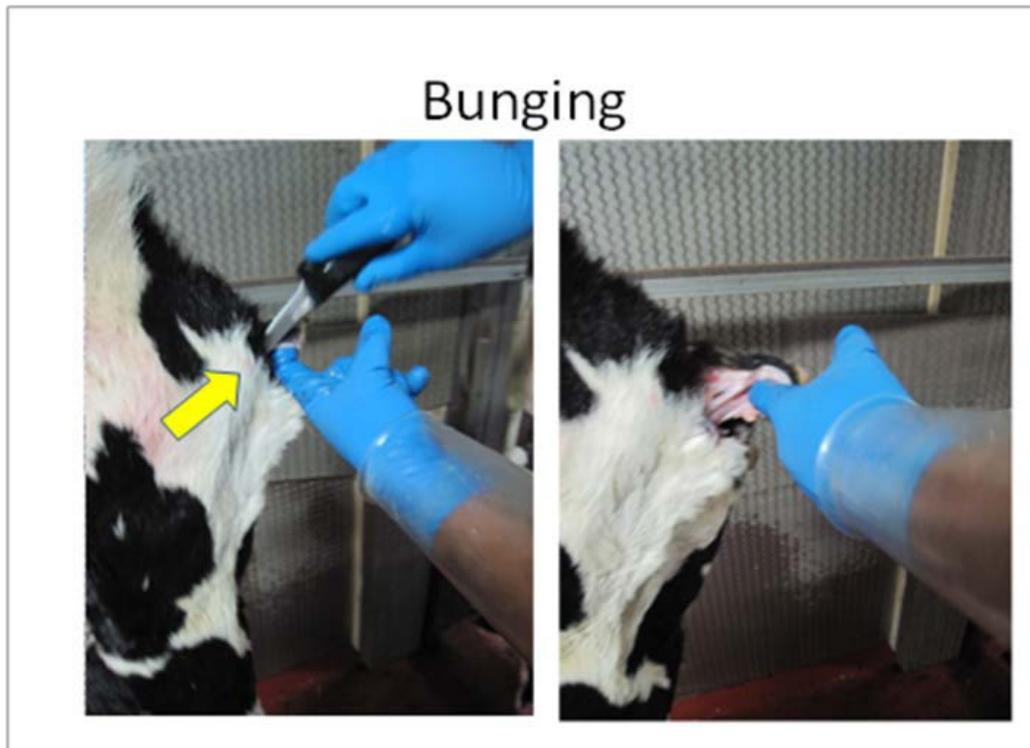
Hide removal

Cut the Aitch Bone



Onsite visits to veal slaughter establishments and reviews of FSAs showed that establishments were cutting through the hide and further dressing the carcass without sanitizing knives, gloves, and equipment adequately to prevent the creation of insanitary conditions. An example would be an employee making a “dirty cut” (one through the hide, left photo) and continuing to cut through aitchbone (yellow arrow) without sanitizing the knife after making the dirty cut. Another example (not pictured) of this would be a veal slaughter establishment further processing veal carcasses with the hide-on. Proper hide removal is a critical step in preventing carcass contamination and the creation of insanitary conditions. While opening the hide (except for the original incisions for sticking and starting the skinning operations at the poll and shanks), FSIS recommends that the employee direct the knife blade toward the hair side of the skin to prevent contaminating the flesh with cut hair (not shown). After making the “dirty cut” and exiting the hide, FSIS recommends that the employee sanitize his knife and glove before making another cut (in this case, cutting through to the aitchbone, right photo).

Bunging



This concept of sanitizing after the “dirty cut” can also be seen with bunging. The employee makes the “dirty cut,” in this case cutting around the tissue surrounding the anus (yellow arrow, top left photo). The employee then sanitizes his knife and gloves before further cutting the exposed tissue (top right photo). FSIS recommends that establishments remove the hide prior to cutting into the carcass. Tying and bagging the bung (not shown) is also an important step to preventing carcass contamination.

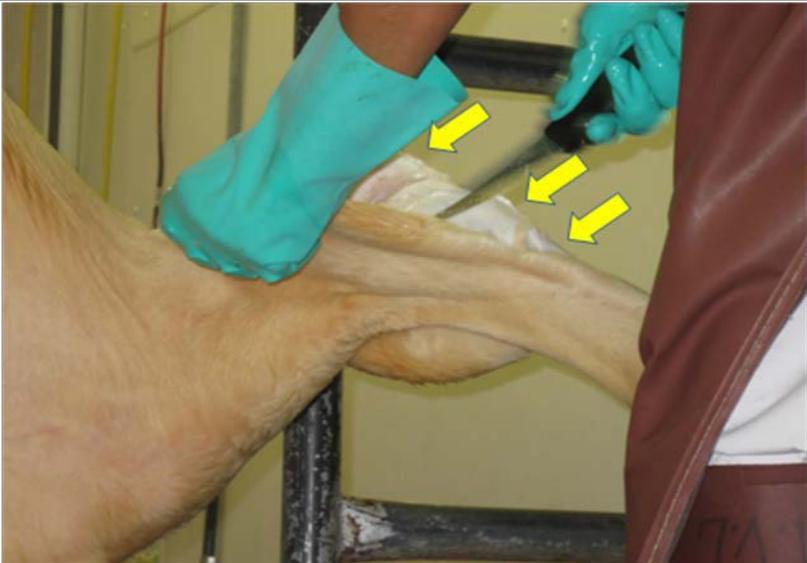
Bunging

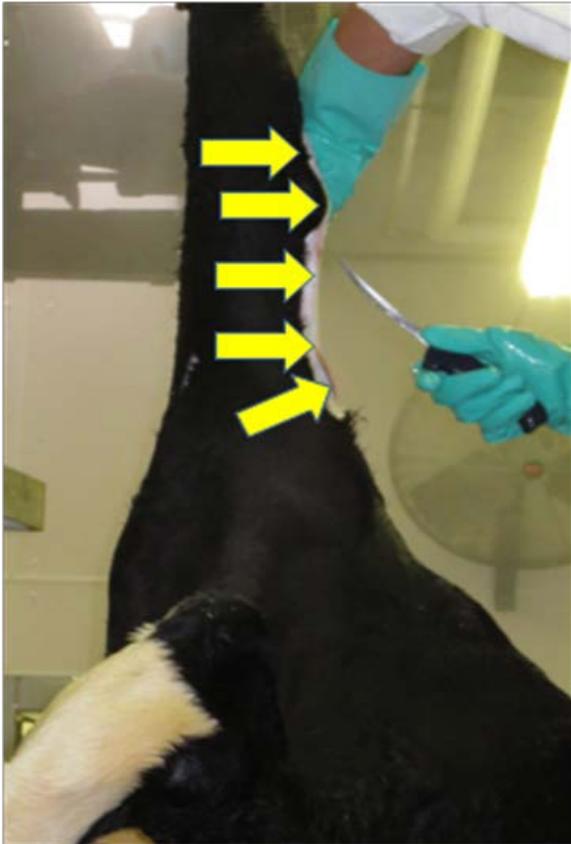


These photos show the impact of the establishment failing to bag and tie the bung. The contaminated bung is contacting the exposed carcass (yellow arrows). When establishments apply hot water or antimicrobial interventions to an exposed bung, it further spreads contamination. FSIS recommends that establishments tie and bag the bung in a sanitary manner.

Hide removal

Legging





These photos show the “legging” process, a part of the hide removal process during which the establishment personnel remove the hide from the hindlimbs. Establishment personnel may introduce contamination at the pattern lines (along the incision lines through the hide, as the arrows show in the two bottom pictures). It is important that establishments prevent contamination throughout the slaughter process and remove contamination promptly when it occurs. The establishment can do this through knife trimming or steam vacuuming.

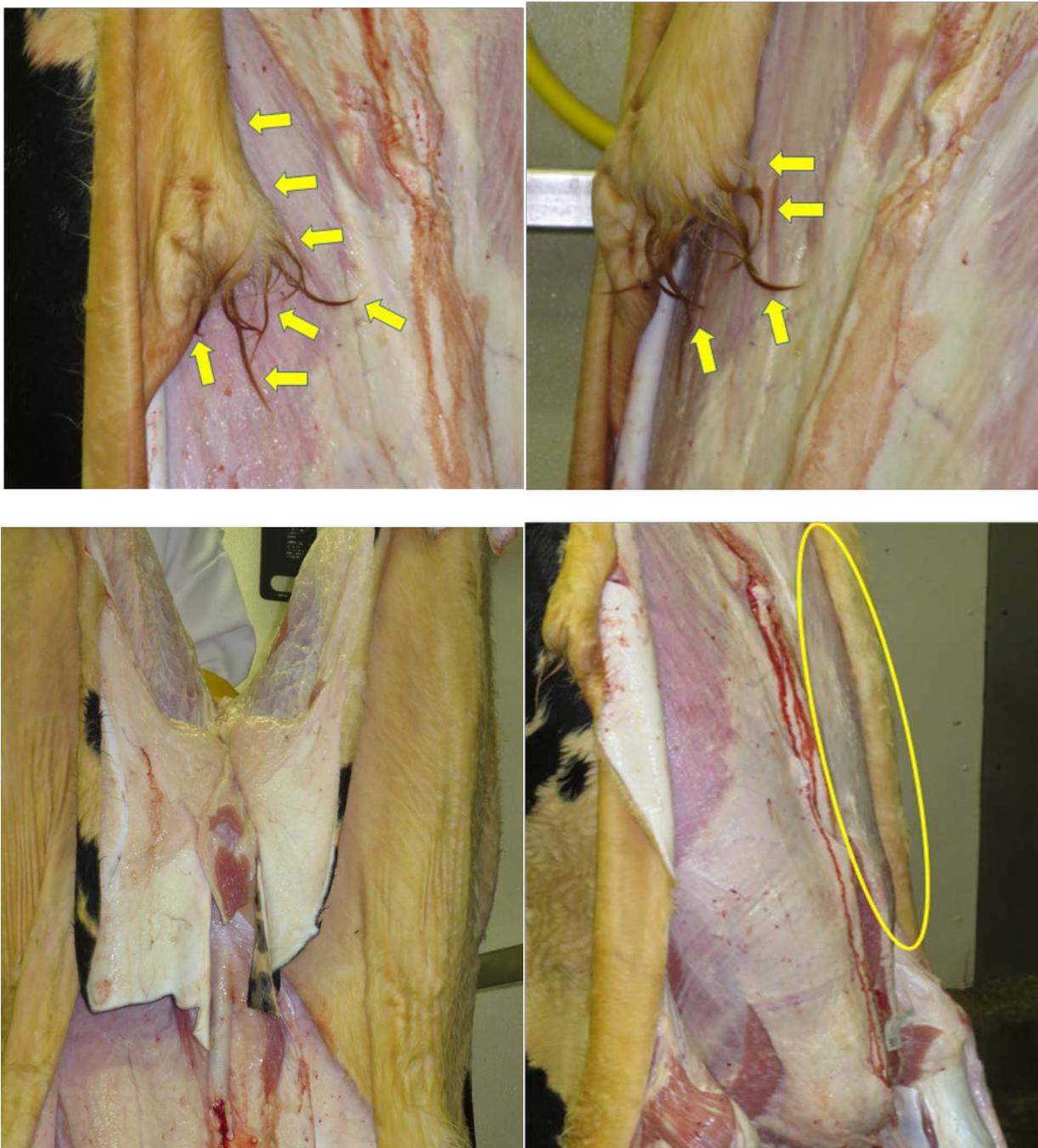
Hide Removal

Sanitize and Remove Debris from Steam Vacuum



Steam vacuuming is a useful intervention for establishments to apply along the pattern lines and for removing incidental contamination. FSIS observed (not shown) employees applying heavily contaminated steam vacuums to carcasses. The purpose of these photos is to remind IPP of the importance of cleaning and sanitizing equipment as often as necessary to prevent the creation of insanitary conditions and cross contamination.

Hide Removal

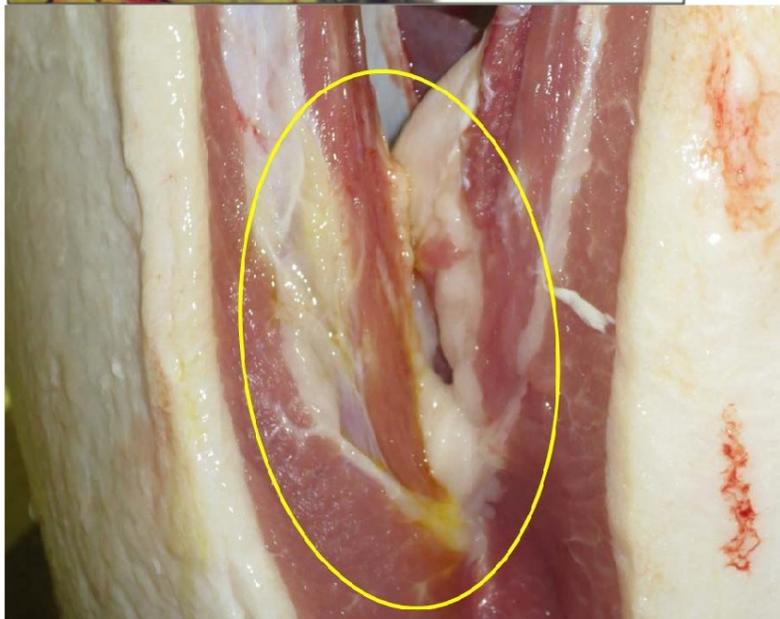


These photos show hide and hair touching the carcass when being removed, potentially allowing the dirty exterior side to touch the carcass. In the bottom left photo, the leg hide flaps are contacting the carcass. The bottom right photo shows hide flaps that have curled under after hide removal (as seen inside the yellow oval) and are contacting the carcass. FSIS recommends that establishments prevent the hide from contacting the carcass during hide removal. The photo below shows the use of hide clips as one method of preventing hide from contacting the carcass.

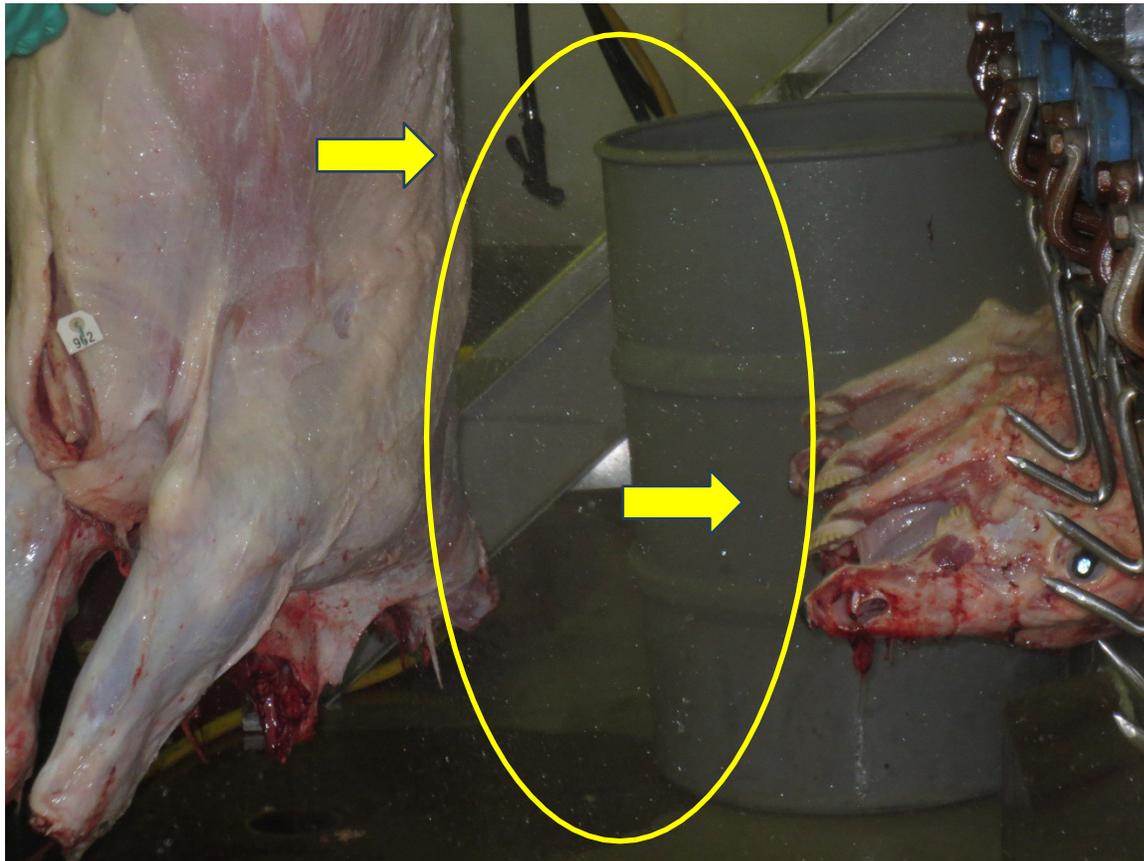


Evisceration

These photos show the establishment puncturing the paunch and intestines during evisceration (top photo, at blue arrow) causing carcass contamination with ingesta (bottom photo, inside yellow oval). FSIS recommends that establishments perform proper sanitary dressing procedures during evisceration to prevent puncturing the paunch and intestines.



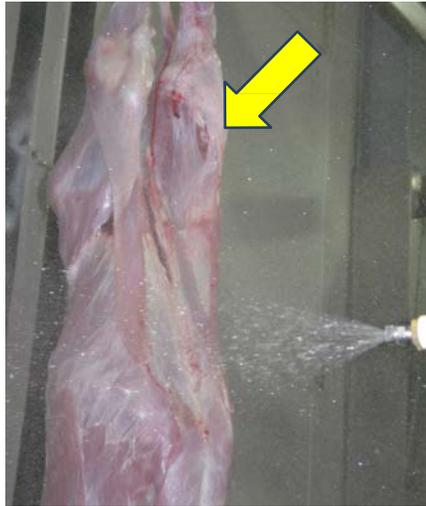
Hide removal (wash cabinets)



This photo shows cross contamination of heads from a spray applied to the carcass (water sprayed onto carcass in the direction of the arrows, water spray seen within the yellow oval). The establishment failed to take measures (e.g., adequate distance or shields) to prevent cross contamination of adjacent heads. Cross contamination (not shown) can also occur while employees spray equipment, the floor, and other surfaces if the establishment does not take appropriate precautions to prevent overspray from contacting carcasses. Also, it is important that carcasses are free of visible contamination prior to entering wash cabinets or the manual application of water or antimicrobial sprays. Otherwise, the intervention could further spread the contamination.

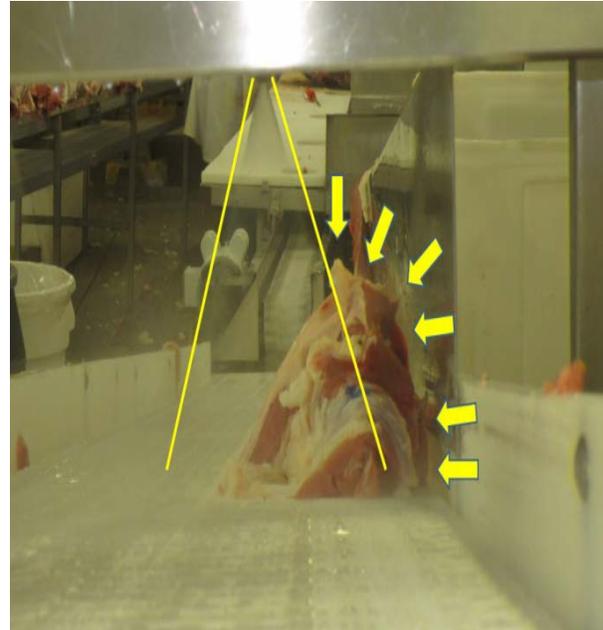
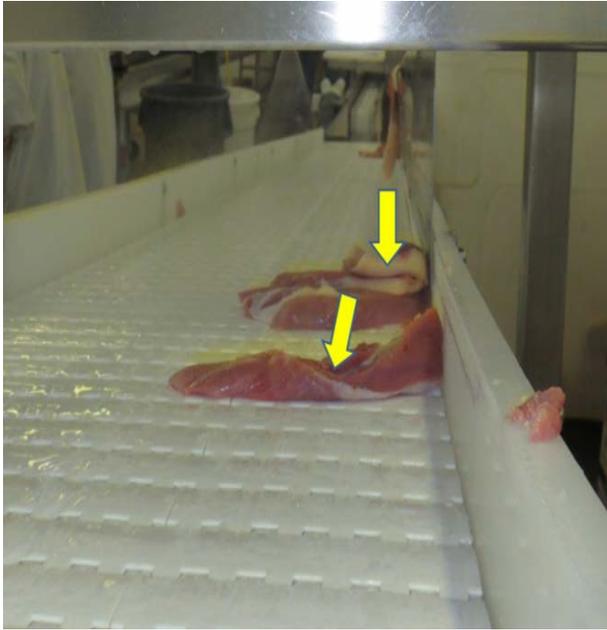
Establishment Interventions

Failure to Implement Interventions Effectively



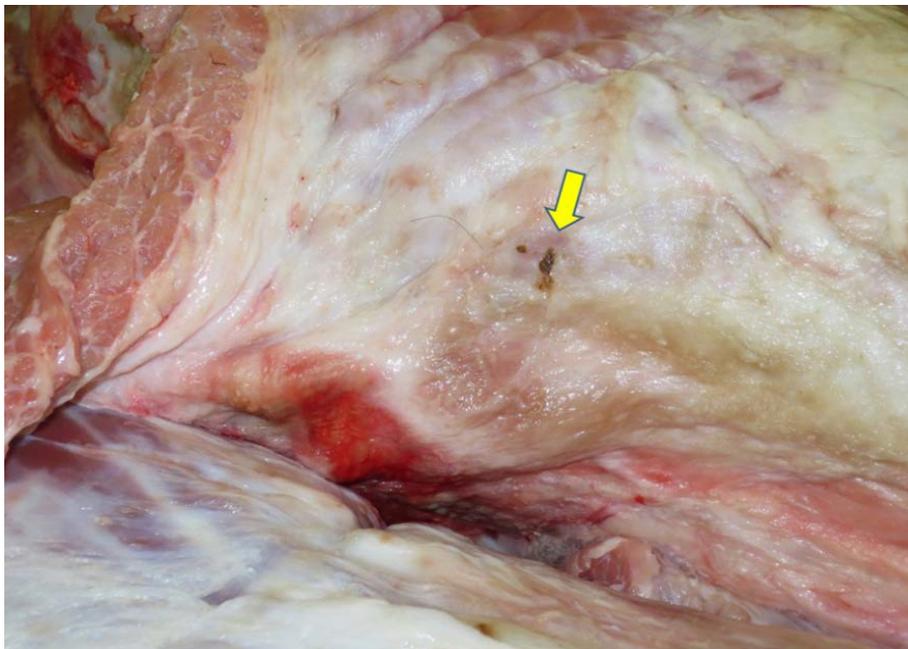
These photos show the practice of suspending a carcass from a single hook, which prevents antimicrobial and hot water interventions from achieving carcass/product coverage. Carcass coverage –ensuring that the entire carcass surface is treated -- is necessary for the intervention to operate effectively and as intended. Additional information is included in FSIS Notice 17-12 Verification of Antimicrobial Intervention Coverage of Carcass or Product at Veal Slaughter and Beef Fabrication Establishments. IPP verify that establishments are implementing their interventions effectively (i.e., according to the establishment’s scientific support) during the observation component of the appropriate Hazard Analysis and Critical Control Point (HACCP) verification task.

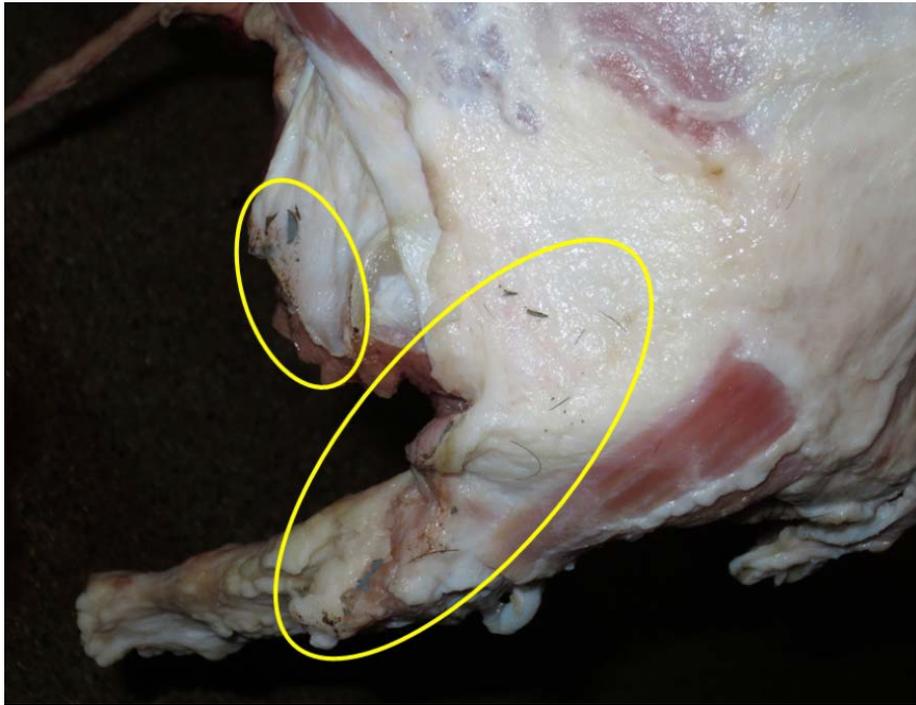
Establishment Interventions



These photos show the establishment's failure to implement its trim antimicrobial intervention spray effectively. The intervention did not achieve full product coverage. Product coverage is essential for the intervention to be effective. Both pictures show that the establishment only applies the intervention to the top side of the trim. These pictures also show product that is folded on top of itself so that not all product surfaces received the intervention (in the left picture each piece has a single fold, and in the right picture the trim is piled up). The picture on the right shows clearly that the arc of the spray nozzles (inside each yellow line) is not sufficient to reach product on the sides of the conveyor belt (yellow arrows).

Results of Sanitary Dressing Deficiencies and Ineffective Application of Interventions





In these photos, we see contamination in the bung area (top left photo), boneless veal legs (top right photo under arrow), breast and shank areas (middle photos under arrow and within ovals), and along the thigh (bottom photo). This contamination resulted from the establishment's failure to implement sanitary dressing procedures to prevent the creation of insanitary conditions and contamination of carcasses, and its failure to implement antimicrobial interventions effectively. Positive STEC test results are a reflection of an establishment's slaughter controls and provide evidence that the establishment is not implementing its slaughter controls effectively to produce safe, unadulterated products.