

**Conference for Food Protection
2020 Issue Form**

Issue: 2020 III-001

Council Recommendation: Accepted as Submitted _____ Accepted as Amended _____ No Action _____

Delegate Action: Accepted _____ Rejected _____

All information above the line is for conference use only.

Issue History:

This is a brand new Issue.

Title:

SHC-RPC - 1 Report - Safe Handling and Cooking of Roaster Pigs Committee

Issue you would like the Conference to consider:

At the 2018 Biennial Meeting of the Conference for Food Protection, the Safe Handling and Cooking of Roaster Pigs Committee was created and charged (Issue: 2018-III-023) with:

1. Identifying best practices, or any existing guidance documents, that relate to proper handling and storage of roaster pigs of various sizes.
2. Developing a comprehensive guidance document for food handlers, particularly caterers, that include detailed best practices for roaster pig preparation. These recommendations would include proper handling, thawing, cooking, and temperature measurement of roaster pigs.
3. Determining appropriate methods of sharing the committee's work.
4. Reporting the committee's findings and recommendations to the 2020 Biennial Meeting of the Conference for Food Protection.

Public Health Significance:

The 2017 Food Code (§3-401.11(A)(2)) recommends cooking non-intact pork products to 155°F for 17 seconds with additional options at lower temperatures for longer lengths of time. For stuffed pork products, the Food Code (§3-401.11(A)(3)) recommends that the product reach a temperature of 165°F. However, due to the unique nature of the product, *Salmonella* outbreaks associated with roaster pigs continue to occur and show no indication of decline.

Inadequate handling and cooking of roaster pigs is a reoccurring food safety hazard that is becoming more prevalent in recent years. In the past three years, at least four *Salmonella* outbreaks have been associated with roaster pigs at special events^{1,2,3}. One of the outbreaks in 2015^{1,4} infected 192 patients across 5 states. Investigation findings indicated inappropriate methods for cold storage prior to cooking that could lead to an outgrowth of bacteria that may not all be destroyed during the cooking process.

Cooking an entire animal has additional challenges not addressed by the currently available cooking guidelines. Current guidance^{5,6,7,8} is not comprehensive for addressing the unique challenges of cooking a whole animal (large size, variation in bone and fat distribution which create temperate variances across the entire large animal, control of humidity during the cooking process, cross contamination of clothes when moving the animal to the cooking location, appropriate methods for thawing of a large animal, appropriate methods for maintaining cold temperatures prior to cooking). Inadequate cooking may occur because the whole animal is being cooked (instead of the parts). When cooking parts, it is much easier to control the temperature and humidity of the oven and subsequently ensure even cooking of the food. However, when cooking a whole animal, it is challenging to control the temperature and humidity, especially when cooked in an open pit or grill. Each part may heat up differently depending on the muscle type, thickness, and proximity to the bone⁸. By the time the stuffing in the center of the pig reaches the appropriate temperature, the outer layers of the pig may be scorched, dried out, and unpalatable. Guidance could include methods to increase the humidity. Adding humidity to the cooking process prevents the surface from drying out, facilitates cooking, prevents heat resistance in the pathogens, and improves palatability. The guidance would also provide methods to ensure all parts of the pig are cooked thoroughly, where to place the thermometer, factors that could influence temperature (e.g., near joints, thickness of product), and at what depth. If the pig is stuffed with additional meat, the stuffing could remain cooler than the rest of the pig (FoodSafety.gov, Food Poisoning Bulletin). Providing this guidance will give retailers additional information to achieve the time and temperature recommendations in the Food Code.

Cross contamination, although not specifically mentioned in the outbreak reports, could also be a factor leading to illnesses. While cross contamination could be associated with any product, roaster pigs present a unique situation due to the size of the product. For example, caterers may clean or change utensils after cooking the product, however, they may not consider changing the clothes they are wearing as they carry the pig to the roasting location. Such findings are likely applicable to other retail food establishments that produce roaster pigs.

The committee developed a guidance document on safe handling and cooking of roaster pigs that would provide a valuable resource for those caterers that infrequently prepare roaster pigs so they are aware of lessons learned from past outbreaks as well as best practices used throughout the industry. This guidance document provides best practices for properly thawing or maintaining at appropriate temperatures prior to cooking, cooking, and measuring the temperature of the product. It also includes information on avoiding cross contamination of the product. By following the information in the guideline, retailers can ensure that the roaster pigs are thoroughly cooked, thereby, decreasing the likelihood of foodborne illness to consumers.

References

1. FSIS 2015 Public Health Alert:
<https://www.fsis.usda.gov/wps/portal/fsis/newsroom/news-releases-statements-transcripts/news-release-archives-by-year/archive/2015/pha-073115>
2. FSIS 2016 Public Health Alert:
<https://www.fsis.usda.gov/wps/portal/fsis/newsroom/news-releases-statements-transcripts/news-release-archives-by-year/archive/2016/pha-072016>

3. FSIS 2017 Public Health Alert:
<https://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/foodborne-illness-investigations/outbreaks-salmonella-pork-products-2015-2016>
4. CDC 2015 Recall and Alert: <https://www.cdc.gov/salmonella/pork-08-15/recall-advice.html>
5. Foodsafety.gov, Pig Roasting and Food Safety: PDF provided as part of Articles Reviewed
6. Food Safety Tech Sheet, Washington State Department of Health:
<https://www.doh.wa.gov/Portals/1/Documents/Pubs/332-165.pdf>
7. Food Poisoning Bulletin, Pig Roasting and Food Safety:
<https://foodpoisoningbulletin.com/2016/pig-roasting-and-food-safety/>
8. How to Roast a Pig: <http://www.esquire.com/food-drink/food/a29391/how-to-roast-a-pig/>

Recommended Solution: The Conference recommends...:

The Conference recommends....

1. Acknowledgment of the 2018-2020 Safe Handling and Cooking of Roaster Pigs Committee report;
2. Thanking the members of the Committee for their work; and
3. That the Committee be disbanded; all charges have been completed.

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Content Documents:

- "Committee Report"
- "Committee Roster"
- "Committee Guidance Document"

Supporting Attachments:

- "Committee Meeting Minutes"
- "Articles Reviewed"

It is the policy of the Conference for Food Protection to not accept Issues that would endorse a brand name or a commercial proprietary process.