An Acute Gastroenteritis Outbreak of Unknown Etiology
Associated with Montana Mike’s Steakhouse — McPherson County, May 2008

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Background

On May 31, 2008, the Kansas Department of Health and Environment (KDHE), Office of Surveillance and Epidemiology (OSE) was notified by the KDHE Bureau of Consumer Health (BCH) of a possible foodborne illness outbreak at Montana Mike’s Steakhouse, 2211 E. Kansas Ave., in McPherson, Kansas. Several patrons developed acute onset of nausea and vomiting after eating at the restaurant on May 30 and May 31. Because many of the patrons were exhibiting symptoms of illness while still at the restaurant and because the etiology of the illness was uncertain, the owner of the establishment closed the restaurant on the evening of May 31 in order to thoroughly clean the facility. The restaurant reopened on June 1. On June 2, KDHE and the McPherson County Health Department initiated an outbreak investigation to determine the cause of illnesses and to provide prevention and control measures.

Methods

Epidemiologic

Staff from the local health department conducted preliminary interviews with individuals who initially reported symptoms. To determine if illness was associated with a specific menu item, a case-control study was conducted among patrons of Montana Mike’s who ate at the restaurant from May 29 to June 1, 2008. A questionnaire was developed and interviews with the cases and controls were administered by telephone by staff of the Behavioral Risk Factor Surveillance Survey (BRFSS) program housed in the KDHE Office of Health Promotion. Controls for the study were well meal companions of ill individuals identified by the local health department and patrons from credit card receipts provided by the owner.

A case was initially defined as a patron who dined at Montana Mike’s from May 27 to June 1 and subsequently became ill with vomiting or diarrhea (3 or more loose stools within a 24-hour period) within 24 hours. However, for the case control study, a case was defined as a patron who dined at Montana Mike’s from May 29 to June 1 and developed vomiting or diarrhea (3 or more loose stools within a 24-hour period) within 24 hours. A control was defined as a patron who dined at Montana Mike’s from May 29 to June 1 and did not develop any gastrointestinal symptoms within 24 hours.

Four controls were randomly selected and matched to one case by date of exposure to the restaurant. Descriptive analyses and univariate conditional logistic regression were performed in SAS 9.1 to assess food exposures that were significantly associated with illness.

Laboratory

No clinical specimens were collected from ill persons for microbiological testing. No food samples were available for collection and testing.

Environmental

An inspection of the restaurant was conducted by KDHE-BCH on June 1. A self-administered questionnaire was distributed to all employees at the facility to assess for illness, work history, and food consumption history.
Results

Epidemiologic

Case Finding

A total of 191 individuals were interviewed. Twenty individuals reported illness (10%). Nausea and diarrhea were the most frequently reported symptoms followed by vomiting, abdominal cramps, headache, and muscle aches (Table 1). Only one individual reported seeking medical care for their illness. Fourteen of the cases were female (70%).

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Number (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>14 (74 %)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>14 (70 %)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>13 (65 %)</td>
</tr>
<tr>
<td>Abdominal Cramps</td>
<td>12 (60 %)</td>
</tr>
<tr>
<td>Headache</td>
<td>5 (28 %)</td>
</tr>
<tr>
<td>Muscle Aches</td>
<td>3 (16 %)</td>
</tr>
</tbody>
</table>

*Symptom information was incomplete for some cases.

Onset dates of illness ranged from May 27 to June 2 (Figure 1). The incubation period ranged from 15 minutes to 14.5 hours, with a median of 50 minutes.
Case Control Study

One hundred seventy-one respondents met the control definition. Of those, 72 (42%) were randomly selected and matched to cases by date of exposure. Two individuals, who dined at the restaurant before May 30, were excluded from the case-control study because they could not be matched by date of exposure to any controls.

The distribution of sex and age for both cases and controls included in the study are shown in Table 2.

Table 2 Characteristics of study population

<table>
<thead>
<tr>
<th></th>
<th>Cases (n=18)</th>
<th>Controls (n=72)</th>
<th>Total (n=90)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. (%)</td>
<td>No. (%)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>13 (72)</td>
<td>41 (57)</td>
<td>54 (60)</td>
</tr>
<tr>
<td>Male</td>
<td>5 (28)</td>
<td>31 (43)</td>
<td>36 (40)</td>
</tr>
<tr>
<td>Age (yrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>2 – 85</td>
<td>1 – 88</td>
<td>1 – 88</td>
</tr>
<tr>
<td>Median</td>
<td>44</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Categories of menu items were analyzed for association with illness. Of those, eating any type of salad including garden salad, garden salad with cheese and bacon, or an entrée salad approached statistical significance. When type of dressing was analyzed, consuming ranch dressing was significantly associated with illness (table 3).

Table 3: Exposure Information

<table>
<thead>
<tr>
<th>Menu Category</th>
<th>Adjusted OR</th>
<th>95% CI</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appetizer</td>
<td>0.41</td>
<td>0.08 – 2.14</td>
<td>0.29</td>
</tr>
<tr>
<td>Entrée Salad</td>
<td>0.66</td>
<td>0.19 – 2.34</td>
<td>0.52</td>
</tr>
<tr>
<td>Steak Dinner</td>
<td>1.18</td>
<td>0.20 – 7.10</td>
<td>0.86</td>
</tr>
<tr>
<td>Seafood Dinner</td>
<td>0.99</td>
<td>0.06 – 17.00</td>
<td>0.99</td>
</tr>
<tr>
<td>Favorite Dinner</td>
<td>1.01</td>
<td>0.15 – 6.71</td>
<td>0.99</td>
</tr>
<tr>
<td>Burger or Sandwich</td>
<td>2.29</td>
<td>0.11 – 48.97</td>
<td>0.60</td>
</tr>
<tr>
<td>Kids Meal</td>
<td>1.31</td>
<td>0.09 – 18.30</td>
<td>0.84</td>
</tr>
<tr>
<td>Side Dish</td>
<td>0.61</td>
<td>0.04 – 9.80</td>
<td>0.73</td>
</tr>
<tr>
<td>Any Salad</td>
<td>4.40</td>
<td>0.89 – 21.71</td>
<td>0.06</td>
</tr>
<tr>
<td>Dressing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ranch</td>
<td>5.43</td>
<td>1.32 - 22.39</td>
<td>0.019</td>
</tr>
<tr>
<td>Dorothy Lynch</td>
<td>5.92</td>
<td>0.41 - 85.55</td>
<td>0.192</td>
</tr>
<tr>
<td>Thousand Island</td>
<td>2.32</td>
<td>0.20 - 26.94</td>
<td>0.502</td>
</tr>
<tr>
<td>Bleu Cheese</td>
<td>5.92</td>
<td>0.73 - 47.72</td>
<td>0.095</td>
</tr>
</tbody>
</table>
Environment

One critical violation was noted during the environmental inspection: an unclean food contact surface. However, prior to the inspection of the establishment, the restaurant had been closed, cleaned thoroughly, and food that was served on May 30 and May 31 was discarded. Of the forty-five employees who completed the employee questionnaire, five employees reported symptoms. Onset dates of illness ranged from May 27 to June 1. Of the employees who reported illness, two of the five had consumed ranch dressing prior to their illness. It is unknown if the other three employees consumed ranch dressing prior to their illness. The ranch dressing served at the restaurant is prepared in-house by staff and contains buttermilk, ranch seasoning and mayonnaise.

Discussion

This was an outbreak of acute gastroenteritis associated with a restaurant. The epidemiologic and clinical data collected during this outbreak are consistent with a point-source outbreak. The short incubation period and clinical symptoms are indicative of a bacterial intoxication possibly caused by *Staphylococcus aureus*. Intoxication by *S. aureus* is characterized by an abrupt onset of vomiting and/or diarrhea with symptoms occurring within a few minutes to eight hours after ingestion of the toxin-contaminated food. Statistical analysis revealed that consumption of ranch dressing was significantly associated with illness, but exactly how or when the homemade dressing became contaminated is unknown. Because no human specimens or food samples were available for laboratory testing, KDHE was unable to confirm the causative agent of this outbreak. *Staphylococcus* food intoxication is the most common type of food intoxication. *S. aureus* contamination can occur when someone handles food with bare hands, especially after touching the face or mouth, or has an exposed sore on hands or arms. Staphylococci are present in the nasal passages and throats and on the hair and skin of 50 percent or more of healthy individuals. Foods commonly implicated in foodborne disease outbreaks caused by *S. aureus* include salad dressing, creamy, non-lettuce salads, cream-filled bakery products, sandwiches, and dairy-based products.

To prevent the growth of *S. aureus* and the production of enterotoxins, ready to eat foods should be held at appropriate cold holding temperatures (< 42°C) to ensure that no toxin build up occurs. Proper food handling should also be implemented, including good hand washing before handling food and having minimal bare hand contact with food.

Acknowledgments – Local Health Department Staff and Office of Health Promotion Health Risk Studies Program Staff

Appendix A - Montana Mike’s Outbreak Investigation Questionnaire

Reported by: Sheri Anderson and Titilayo Aghoghovbia

1 FDA, Foodborne Pathogenic Microorganisms and Natural Toxins Handbook, September 1999
Our Vision and Mission

As the state’s environmental protection and public health agency, KDHE promotes responsible choices to protect the health and environment for all Kansans.

Through education, direct services, and the assessment of data and trends, coupled with policy development and enforcement, KDHE will improve health and quality of life. We prevent injuries, illness, and foster a safe and sustainable environment for the people of Kansas.

Appendix A
Hello. My name is [YOUR NAME], and I am calling from the Kansas Department of Health and Environment. We are working with the McPherson County Health Department to investigate gastrointestinal illnesses among persons who may have eaten at Montana Mike’s in McPherson from Thursday, May 29 through Sunday, June 1. To help with our investigation the restaurant owner has provided us a list of names of persons believed to have eaten at Montana Mike’s during this time period. I am calling for [PATRON NAME].

Is he or she available?
- If YES: Proceed to next paragraph when speaking with identified patron.
- If NO: Is there a time that would be convenient for me to call back?
  - If YES: Record on Tracking Sheet.
  - If NO: Leave message for patron to return call to 866-445-1429.

[Repeat if necessary when speaking with correct PATRON: My name is [YOUR NAME], and I am calling from the Kansas Department of Health and Environment. We are working with the McPherson County Health Department to investigate gastrointestinal illnesses among persons who may have eaten at Montana Mike’s in McPherson from Thursday, May 29 through Sunday, June 1. To help with our investigation the restaurant owner has provided us a list of names of persons believed to have eaten at Montana Mike’s during this time period.]

To determine the cause of illness and to prevent future occurrences, we are collecting information from individuals who became ill as well as those that did NOT become ill. Your participation is completely voluntary, and any information you provide will be kept strictly confidential.

Did you eat at Montana Mike’s on Thursday, May 29, or Friday, May 30, or Saturday, May 31, or Sunday, June 1?
- ☐ Yes
- ☐ No

If NO: Thank you for your cooperation.

1. Last Name: ____________________  First Name: ____________________  2. Phone: (___)___-____
3. County: ____________________  4. Age: ________Years  5. Sex: ☐ Male ☐ Female

6. What date and time did you eat at Montana Mike’s? Date __/__/____  Time __:___ ☐ a.m. ☐ p.m.

Now we will ask about menu items that you consumed at Montana Mike’s.

7. Did you eat any appetizers? ☐ Yes ☐ No  ☐ Do’t know  If no, skip to question 8

*Please check each menu item the interviewee had eaten*

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onion Rings</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Boneless Buffalo Wings</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Mountain Stuffed Mushrooms</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Fried Mushrooms</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Fried Zucchini</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cheese Fries</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Potato Boats</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Chili Nachos</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
8. Did you have any Entrée salads?  

- Yes
- No

If no, skip to question 9

**Please check each menu item the interviewee had eaten**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinner Salad</td>
<td></td>
<td></td>
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<tr>
<td>Dinner Salad with Chicken Tenders</td>
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<tr>
<td>Dinner Salad with Chicken Breast</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dinner Salad with Grilled Shrimp</td>
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<td></td>
<td></td>
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<tr>
<td>Dinner Salad with Sirloin Steak</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Chicken Tostada Salad</td>
<td></td>
<td></td>
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<tr>
<td>Buffalo Chicken Salad</td>
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<td></td>
<td></td>
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<tr>
<td>Chicken Caesar Salad</td>
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</tbody>
</table>

What dressing did you have on your salad?

9. Did you have a Steak?  

- Yes
- No

If no skip to question 10

**Please check each menu item the interviewee had eaten**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Sirloin Steak</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mike’s Big Montana Steak</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas City Strip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filet Mignon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ribeye Steak</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cracked Peppercorn Sirloin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ‘44’ Sirloin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porterhouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rancher’s T-Bone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mushroom and Garlic Studded Ribeye</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Did you have a Combination Dinner?  

- Yes
- No

If no skip to question 11

**Please check each menu item the interviewee had eaten**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steak and Shrimp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBQ Chicken and Ribs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steak and Ribs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Did you have Seafood?  

- Yes
- No

If no skip to question 12

**Please check each menu item the interviewee had eaten**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grilled Shrimp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fried Shrimp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fried Catfish Strips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glazed Salmon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trout</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Did you have an Other Favorite?  

- Yes
- No

If no skip to question 13

**Please check each menu item the interviewee had eaten**

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pork Chops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain Topper – Chopped Sirloin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain Topper – Grilled Chicken</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken Pasta Alfredo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italiano Chicken Pasta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kabobs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chicken Fried Sirloin Steak  ☐ Yes ☐ No ☐ Don’t know
BBQ Ribs  ☐ Yes ☐ No ☐ Don’t know
Chicken Tenders  ☐ Yes ☐ No ☐ Don’t know
Teriyaki Glazed Chicken  ☐ Yes ☐ No ☐ Don’t know
Grilled Chicken Breast  ☐ Yes ☐ No ☐ Don’t know
Chopped Sirloin Steak  ☐ Yes ☐ No ☐ Don’t know
Beef Tips  ☐ Yes ☐ No ☐ Don’t know

13. Did you have the Burgers or Sandwiches?  ☐ Yes  ☐ No  if no skip to
question 14

Please check each menu item the interviewee had eaten

Grilled Chicken Breast  ☐ Yes ☐ No ☐ Don’t know
Bacon Swiss Mushroom Burger  ☐ Yes ☐ No ☐ Don’t know
Summit Burger  ☐ Yes ☐ No ☐ Don’t know
Hamburger  ☐ Yes ☐ No ☐ Don’t know
BBQ Chicken  ☐ Yes ☐ No ☐ Don’t know
Hickory Burger  ☐ Yes ☐ No ☐ Don’t know
Ribeye Steak Sandwich  ☐ Yes ☐ No ☐ Don’t know
Mountain Burger  ☐ Yes ☐ No ☐ Don’t know
Roadhouse Grilled Chicken  ☐ Yes ☐ No ☐ Don’t know
Chicken Fried Sirloin Sandwich  ☐ Yes ☐ No ☐ Don’t know
Buffalo Burger  ☐ Yes ☐ No ☐ Don’t know

14. Did you have anything from the kid’s menu?  ☐ Yes  ☐ No  if no skip to
question 15

Please check each menu item the interviewee had eaten

Hamburger  ☐ Yes ☐ No ☐ Don’t know
Cheeseburger  ☐ Yes ☐ No ☐ Don’t know
Chicken Strips  ☐ Yes ☐ No ☐ Don’t know
Mini Corndogs  ☐ Yes ☐ No ☐ Don’t know
Grilled Cheese Sandwich  ☐ Yes ☐ No ☐ Don’t know

15. What sides did you have with your meal?
Please check each menu item the interviewee had eaten

Baked Potato  ☐ Yes ☐ No ☐ Don’t know
Loaded Baked Potato  ☐ Yes ☐ No ☐ Don’t know
French Fries  ☐ Yes ☐ No ☐ Don’t know
Mashed Potatoes  ☐ Yes ☐ No ☐ Don’t know
Sweet Potato  ☐ Yes ☐ No ☐ Don’t know
Steamed Veggies  ☐ Yes ☐ No ☐ Don’t know
Green Beans  ☐ Yes ☐ No ☐ Don’t know
Cottage Cheese Salad  ☐ Yes ☐ No ☐ Don’t know
Garden Salad  ☐ Yes ☐ No ☐ Don’t know
Loaded Garden Salad  ☐ Yes ☐ No ☐ Don’t know

What dressing did you have on
your salad?
Cinnamon Apple Slices □ Yes □ No □ Don’t know
Sliced Mushrooms □ Yes □ No □ Don’t know
Garlic Toast □ Yes □ No □ Don’t know

16. Did you have any dessert? □ Yes □ No  if no skip to question 17
Please check each menu item the interviewee had eaten
White Chocolate Cheesecake □ Yes □ No □ Don’t know
Chocolate cake □ Yes □ No □ Don’t know
Rocky Mountain Mudslide □ Yes □ No □ Don’t know
Carrot Cake □ Yes □ No □ Don’t know

17. Did you consume any other food items at Montana Mike’s? □ Yes □ No
If yes, please list _______________________________________________________________

18. What did you drink? □ Water □ Ice Tea □ Pepsi □ Diet Pepsi
□ Sierra Mist □ Mountain Dew □ Dr. Pepper □ Coffee □ IBC Root Beer
□ Bottle Beer □ Draft Beer □ Wine □ Mixed Drink (Grand Teton Ice Tea, Helena Ice Tea, Margarita, other) □ Other

19. Did you have ice in your drink? □ Yes □ No □ Don’t know

20. Did you use any other condiments or dressing on your food?
__________________________________

21. Did any of your food or drinks have an odd taste? □ Yes □ No
If yes, did the food taste?
□ Metallic □ Acidic □ Bitter □ Sour □ Alcoholic □ Sweet □ Salty
□ Other ___________________________________
What was the food or drink item? ________________________________________________

22. Did any food or drink item have an unusual odor? □ Yes □ No
If yes, please describe the odor? _______________________________________________
What was the food or drink item? _______________________________________________

23. Did the food or drink have an unusual texture or color? □ Yes □ No
If yes, please describe the texture or color? _______________________________________
What was the food or drink item? _______________________________________________

24. Did you become ill after you ate or drank? □ Yes □ No  If no, skip to 32

25. When did you start feeling ill?  Date ____/____/______  Time ____ : ____  □ a.m. □ p.m.
26. What was your first symptom? _____________________________________________

27. Did you have any of the following symptoms?
   Nausea?  ☐ Yes  ☐ No  ☐ Don’t know
   Vomiting? ☐ Yes  ☐ No  ☐ Don’t know
   Stomach cramps? ☐ Yes  ☐ No  ☐ Don’t know
   Diarrhea?(more than 3 loose stools in a 24 hour period)
       How many stools in a 24 hour period? __________________
   Bloody diarrhea? ☐ Yes  ☐ No  ☐ Don’t know
   Muscle Aches? ☐ Yes  ☐ No  ☐ Don’t know
   Headache? ☐ Yes  ☐ No  ☐ Don’t know
   Fever? ☐ Yes  ☐ No  ☐ Don’t know
   If yes, highest temperature? ________ °F
   Please indicate any other symptoms: _________________________________________

28. Did you see a doctor or other healthcare professional for this illness?  ☐ Yes  ☐ No
   If yes, provide name and phone number: ____________________________________

29. Were you hospitalized?  ☐ Yes  ☐ No
   If yes, where? _________________________________________________________

30. Was a clinical specimen collected?  ☐ Yes  ☐ No
   Type of Specimen: ____________ Date Collected: ________________

31. Are you still ill?  ☐ Yes  ☐ No
   If no, when did you recover? Date ________________ Time ________________

The next few questions will ask about other persons who ate with you at Montana Mike’s. We would like to interview everyone who lives in your household and ate at Montana Mike’s on Thursday, May 29, or Friday, May 30, or Saturday, May 31, or Sunday, June 1.

32. How many other people, not including yourself, were in your dining party for any of the meals that you had at Montana Mike’s? ________ people
   (If = ’0’ skip to Q43; If ‘1 or more’ go to Q33)

33. How many of the people, who ate with you at Montana Mike’s, live in your household?
    ________ (If ‘0’ skip to Q42; If ‘1 or more’ ask for their names and then go to Q34)
Please provide me with their names:

#1 __________________ #4__________________ #7 __________________
#2 __________________ #5 __________________ #8 __________________
#3__________________ #6 __________________ #9 __________________

34. Are any of the people you have named under 12 years of age?   ✔ Yes   ❏ No
   (If ‘Yes’ go to Q35; If ‘No’ go to Q36)

35. May we ask you the same questions about their food exposures and illness information?
   ✔ Yes   ❏ No
   (If ‘Yes’ conduct a separate interview for each child; If ‘No’ go to Q36)

36. Are any of the people you have named between 12 and 17 years of age?   ✔ Yes   ❏ No
   (If ‘Yes’ go to Q37; If ‘No’ go to Q39)

37. May we ask him or her the same questions about their food exposures and illness information?
   ✔ Yes   ❏ No
   (If ‘Yes’ conduct a separate interview for each child; If ‘No’ go to Q38)

38. May we ask you the same questions about their food exposures and illness information?
   ✔ Yes   ❏ No
   (If ‘Yes’ conduct a separate interview for each child; If ‘No’ go to Q39)

39. Are any of the people you have named 18 years of age and older?   ✔ Yes   ❏ No
   (If ‘Yes’ go to Q40; If ‘No’ go to Q42)

40. Is this person currently available to be interviewed?
   (This question needs to be asked for all persons named above).

   #1   ❏ Yes   ❏ No   Alternate time to call: _____________
   #2   ❏ Yes   ❏ No   Alternate time to call: _____________
   #3   ❏ Yes   ❏ No   Alternate time to call: _____________
   #4   ❏ Yes   ❏ No   Alternate time to call: _____________
   #5   ❏ Yes   ❏ No   Alternate time to call: _____________
   #6   ❏ Yes   ❏ No   Alternate time to call: _____________
   #7   ❏ Yes   ❏ No   Alternate time to call: _____________
   #8   ❏ Yes   ❏ No   Alternate time to call: _____________
   #9   ❏ Yes   ❏ No   Alternate time to call: _____________

   (If ‘Yes’, go to Q41; If ‘No’, ask when you can call back – If respondent provides an alternate phone number, contact the person at this number)

41. May I speak with this person?

   #1   ❏ Yes   ❏ No
   #2   ❏ Yes   ❏ No
   #3   ❏ Yes   ❏ No
   #4   ❏ Yes   ❏ No
#5 ☐ Yes  ☐ No
#6  ☐ Yes  ☐ No
#7  ☐ Yes  ☐ No
#8  ☐ Yes  ☐ No
#9  ☐ Yes  ☐ No

(If ‘Yes’, conduct a separate interview for this person; If ‘No’ go to Q42)

42. Will you provide the contact information for the persons in your dining party who do not live in your household?  ☐ Yes  ☐ No

Name _____________________________________ Phone:______________ Ill ☐ Yes ☐ No
Name _____________________________________ Phone:______________ Ill ☐ Yes ☐ No
Name _____________________________________ Phone:______________ Ill ☐ Yes ☐ No
Name _____________________________________ Phone:______________ Ill ☐ Yes ☐ No
Name _____________________________________ Phone:______________ Ill ☐ Yes ☐ No

43. Do you have other comments or information you would like to share?

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Thank you for your cooperation. This information will help us determine the cause of illness and prevent future occurrences.