

INVESTIGATION OF AN ALLEGED FOODBORNE ILLNESS:

**Brixx and Barley
152 West Park Avenue
Long Beach, New York**

OMS201915855

NASSAU COUNTY DEPARTMENT OF HEALTH

December 27, 2019

**REPORTED BY: Ilana Greenblatt and Alyssa Zohrabian, MPH,
Foodborne Illness Surveillance Officer**

Summary

Date of outbreak: June 6, 2018, June 21, 2019 to August 20, 2019

Agent identified: *Salmonella typhimurium*

Where outbreak occurred: A restaurant permitted by NCDOH

Who and number affected: A total of 51 confirmed cases of *Salmonella typhimurium*, 41 of whom reported to consume food from the implicated restaurant. Of note, 10 cases could not be contacted (for initial interview or re-interview) to verify exposure to the restaurant prior to illness onset. Numerous additional epi-linked cases self-reported to the Department.

Source or vehicle: Unknown

Laboratory results: 51 confirmed cases of *Salmonella typhimurium* with isolates related by WGS (0-7 SNPs). One food sample (sliced tomatoes) from the implicated restaurant tested positive for *S. typhimurium* and was genetically related to the clinical isolates within 0-1 alleles.

Outbreak was first reported by: NCDOH Bureau of Communicable Disease Control

Investigators: Alyssa Zohrabian, Public Health Sanitarian I; Danielle Mahoney, Public Health Sanitarian II; Vivian Chokry, Public Health Sanitarian Trainee; Caitlin Corona, Public Health Sanitarian Trainee;

Interviewers: Caitlin Corona, Public Health Sanitarian Trainee; Carlos Lemus, Public Health Sanitarian Trainee; Sebastian Ortega, Public Health Sanitarian Trainee; Janis Lambert, Public Health Sanitarian I.

Name, size, and type of food service establishment: The establishment is a privately-owned restaurant, seating approximately 150, which offers American-style cuisine, craft beer, and pizza. The establishment's service is a combination of sit-down dining, bar service, pizza counter service, and an ice cream counter. The establishment is located in Long Beach, New York, which sees a higher population in the summer season.

Narrative:

On July 19, 2019, the Nassau County Department of Health (NCDOH) Office of Food Protection (OFP) received a call from a resident stating they were diagnosed with Salmonella. A three-day food history was obtained and included a meal of buffalo chicken wings from Brixx and Barley consumed on [REDACTED], 2019. Lab results were later obtained by NCDOH Bureau of Communicable Disease Control (BCDC). An inspector was dispatched to the facility to investigate. This visit resulted in a failure level inspection, including multiple refrigeration units not properly holding potentially hazardous foods at or below 45°F, a hot holding unit not properly holding potentially hazardous foods at or above 140°F, and multiple hand wash station violations. A revisit two days later saw a repeat of improper cold holding of potentially hazardous foods and hand wash station violations.

By [REDACTED], 2019, there were [REDACTED] confirmed cases of Salmonella who had reported consuming foods at Brixx and Barley within a three-day window ([REDACTED], 2019). Members of the Foodborne Illness Investigation Team were dispatched to further investigate the illnesses and interview employees. The visit resulted in another failure level inspection. Sixteen imminent health hazard and critical violations, and seventeen sanitation violations were cited. Inspectors found three refrigeration units and one hot holding unit improperly holding potentially hazardous foods in the temperature danger zone, potentially hazardous foods improperly cooling, bare hand contact with ready-to-eat chicken, and foods adulterated by vermin amongst other critical violations. In addition, inspectors found hand wash station violations and warewashing violations not allowing for proper washing, rinsing, and sanitizing. Improperly functioning refrigeration units were placed under embargo by NCDOH and the operators were mandated to limit their menu due to the lack of refrigeration.

Nineteen Brixx and Barley employees were interviewed by OFP investigators on site, none of which reported illness. It was decided that stool testing of food handlers was to take place, and a list of employees was provided to OFP by the operators. The list included 14 food handlers to be tested. After subsequent visits to the facility and additional confirmed cases being linked to the facility, OFP questioned the true amount of food handlers at the establishment. A new list was obtained, and it was determined that there were twenty-six food handlers. Stool specimens were collected and sent to the New York State Department of Health (NYSDOH) Wadsworth Center Laboratory for testing. Employees who were later determined to be food handlers were permitted to have their testing conducted by their private physician, if they chose. All employees tested negative for Salmonella.

Several revisits to the facility were conducted in the following days in an effort to contain the outbreak and improve their food safety practices. Confirmed cases continued to be linked to the establishment after control measures were put into place by the operator. Additional visits yielded more violations that could contribute to illness. On August 9, 2019 a Commissioner's Order for Closure was issued. Nine food samples were collected at the time the closure order was issued. The food samples were sent to the NYSDOH Wadsworth Center for testing. One food sample, raw, sliced tomatoes served ready-to-eat, and stored in the salad/sandwich preparation refrigerator at the cook line, tested positive for *Salmonella*. Furthermore, the isolate was related by WGS to the clinical isolates within 0-1 alleles.

The implicated restaurant remained closed for deep cleaning and pending the results of clinical testing of the employees. All food workers denied symptoms and illness, and their test results were all negative. Field inspectors conducted several walk-throughs of the facility during the time they were closed. During those visits, two environmental swabs were taken. They were sent to Wadsworth Center for testing, and the results were negative for pathogens. Additionally, during the closure period it was determined that the hot water supply was insufficient for the scope of the operation. Subsequently, a new, approved water heater was installed.

The facility was given permission to re-open to the public on August 20, 2019. For the next several days the establishment was heavily monitored by Department sanitarians. Once the enhanced monitoring period ended, routine visits were still made to the facility. The operators were also required to keep temperature charts for all refrigeration and report this to the Department for several weeks going forward. The establishment remains on the priority inspection schedule to be inspected every three months until they operators continuously demonstrate the safe operation of a food facility.

The case definition for this outbreak was illness in a person infected with *Salmonella typhimurium* with isolate related by WGS (0-7 SNPs) and with an isolation date from June 12, 2018 to September 17, 2019. Symptom onset ranged from June 9, 2018 through September 16, 2019. Exposure dates at the implicated food facility ranged from June 6, 2018 through August 20, 2019. Notably, [REDACTED] had exposure to the restaurant in 2018. [REDACTED] was diagnosed on [REDACTED], 2018 and had an onset date of [REDACTED] 2018. Upon recent re-interview, it was confirmed that [REDACTED] had eaten food at the implicated facility on [REDACTED] 2018. All other cases in this outbreak occurred in 2019 with exposure dates ranging from June 21, 2019 through August 20, 2019, and onset dates from June 27, 2019 through September 16, 2019. The majority of cases were New York State residents (46) , but also included residents of Florida ([REDACTED] Georgia ([REDACTED] Maryland ([REDACTED] New Jersey ([REDACTED] and Tennessee ([REDACTED]

In [REDACTED] 2019, NYSDOH Wadsworth Center identified a new WGS-related clinical isolate to the cluster. The case was an [REDACTED] (who did not consume food) who was at the implicated establishment on the day they were given permission to re-open. Subsequently, 46 additional environmental swabs were taken at the facility and a full inspection conducted. Some violations noted could contribute to foodborne illness. Testing at the NYSDOH Wadsworth Center revealed all swabs to be negative for pathogens.

No specific food or ingredient was implicated in this outbreak. Chicken items appeared prominently in the foods consumed by patients. Some patients did not consume any chicken items, and only ate burgers, salads, pizza, or seafood.

Routine epidemiological surveillance of reportable diseases did not identify any cases related to any other specific establishment or food ingredient. In addition to the 51 WGS-related cases, the Department received several reports of ill patrons who had dined at the establishment but were not clinically tested. One food sample, (sliced tomatoes) served at the establishment tested positive for *S. typhimurium* and was genetically related to the clinical isolates within 0-1 alleles. Several critical violations that were identified as risk factors for foodborne illness were noted during numerous visits to the establishment. Given the epidemiological data, and the food safety violations noted at the establishment, this appears to be a point-source outbreak related to the implicated restaurant.