

Multistate Outbreak of *Salmonella* Thompson Associated with Chicken Served at an El Pollo Loco Restaurant in Barstow, California – August to September 2019

Final Report

May 2020

Prepared by Omar Hummadi
California Department of Public Health
Food and Drug Branch
Emergency Response Unit

California Department of Public Health
Food and Drug Branch
P.O. Box 997435, MS 7602
Sacramento, CA 95899

Table of Contents

Agencies Involved	2
Dates of Investigation	2
Executive Summary.....	3
Background	4
Inspection and Environmental Assessment.....	4
Traceback Investigation	5
Laboratory Results	5
Corrective Actions.....	5
Employee Testing.....	6
Summary of Outbreak Investigation Findings	6
Attachments.....	7
Exhibits.....	7

Agencies Involved

California Department of Public Health (CDPH), Food and Drug Branch (FDB), Emergency Response Unit (ERU)
CDPH, Food and Drug Laboratory Branch (FDLB)
CDPH, Division of Communicable Disease Control (DCDC), Infectious Diseases Branch (IDB)
San Bernardino County Department of Public Health (SBCDPH)
United States Department of Agriculture (USDA), Food Safety Inspection Service (FSIS)

Dates of Investigation

October 2019 – December 2019

Executive Summary

From October to December 2019, the California Department of Public Health (CDPH) Food and Drug Branch (FDB), participated in a multistate outbreak investigation of *Salmonella* Thompson (CDC cluster code 1909MLJP6-1) linked to the consumption of chicken purchased from an El Pollo Loco (EPL) restaurant located at 2820 Lenwood Road in Barstow, California (EPL #3510).

A total of 34 Salmonellosis cases were reported from six states including 21 cases in California. Illness onset dates ranged from July 18, 2019 through October 19, 2019. The median age of patients was 44 years (range 4 to 88). Among the 34 patients, 17 were female, five were hospitalized, and zero deaths were reported. Out of the 22 patients with available information, 15 patients from California (12) and Nevada (3) reported consumption of chicken purchased from EPL #3510 from August 2 to September 28, 2019.

On October 23, 2019, San Bernardino County Department of Public Health (SBCDPH) staff conducted an inspection at EPL #3510 in Barstow. The inspection identified several out-of-compliance items and one major violation related to a potentially hazardous food (salsa) being stored at an elevated temperature (Exhibit A).

On October 24, 2019, FDB and SBCDPH staff initiated an environmental assessment (EA) at EPL #3510. Seventy-five environmental swabs and five raw chicken samples were collected at the restaurant and tested by CDPH, Food and Drug Laboratory Branch (FDLB) for *Salmonella*. Laboratory results confirmed that 13 environmental swabs and one chicken sample were positive for *Salmonella* Thompson. The positive environmental swabs were collected from various food contact and non-food contact surfaces including cleaning utensils (mop heads, dustpan, floor squeegee), floors, walls, floor drains, control timer for the chicken marinating tumbler, and a knife and cutting board used to cut cooked chicken. Whole genome sequencing (WGS) analysis revealed that the environmental isolates were closely related to the clinical isolates from the outbreak cluster (0-3 alleles). The chicken sample was also closely related (0-1 alleles) to the clinical isolates.

In response to the outbreak, management at EPL #3510 voluntarily closed the restaurant on October 24, 2019, and implemented several corrective actions including mandatory food safety training for employees; professional cleaning and sanitation of the restaurant; third-party environmental testing and monitoring; and disposal and replacement of various supplies and equipment at the store. The store reopened on November 22, 2019.

Additionally, SBCDPH initiated testing of employees at EPL #3510 on November 8, 2019. Test results revealed that one employee at the restaurant was positive for *Salmonella* Thompson. WGS analysis confirmed that the employee's isolate matched the clinical isolates from the outbreak cluster (0 allele difference). This employee was also reported to have been working at another food facility in Barstow, California. This employee was excluded from working as a food handler at all food facilities pending completion of clearance testing for *Salmonella*.

WGS analysis linking the environmental swabs, a raw chicken sample, and an EPL #3510 employee confirmed that food served at this location of EPL was the likely source of the outbreak. Inadequately trained employees may have resulted in cross-contamination and/or under-cooking of chicken from early August 2019 through the end of September 2019.

CDPH closed this investigation on January 9, 2020.

Multistate Outbreak of *Salmonella* Thompson Associated with Chicken Served at an El Pollo Loco Restaurant in Barstow, California – August to September 2019

Background

From October through December 2019, FDB, in coordination with CDPH Infectious Diseases Branch (IDB), the U.S. Centers for Disease Control and Prevention (CDC), and SBCDPH, participated in a multistate outbreak investigation of *Salmonella* Thompson (CDC cluster code 1909MLJP6-1) linked to the consumption of chicken purchased from EPL #3510 in Barstow, California.

Thirty-four cases of Salmonellosis were identified in six states including Arizona (3), California (21), Nevada (7), Ohio (1), Oklahoma (1), and Washington (1). The California cases were from six local health jurisdictions. Illness onset dates for patients ranged from July 18, 2019 through October 19, 2019. The median age of patients was 44 years (range 4 to 88). Among the 34 patients, 17 (50%) were female, five were hospitalized, and none died.

Among the 22 patients with available information, 15 (68% - California (12) and Nevada (3)), reported consumption of chicken purchased from EPL #3510 in the seven days prior to illness. Known meal dates for these patients ranged from August 2 to September 28, 2019.

Inspection and Environmental Assessment

On October 23, 2019, SBCDPH staff conducted an inspection at EPL #3510 to identify any health hazards present at the restaurant. During the inspection, a SBCDPH inspector documented eight out-of-compliance and one major violation finding at the restaurant (Exhibit A). The observed major violation was described as a failure to store potentially hazardous food at the required holding temperature; more specifically, pitchers of salsa stored inside of a reach-in-cooler were held at 48.6 °F instead of the required temperature of 41.0 °F or below. This violation was corrected immediately by restaurant management during the inspection.

On October 24, 2019, FDB staff, with the assistance of SBCDPH staff, initiated an EA at EPL #3510. The team collected 75 environmental swabs (from food and non-food contact surfaces in the restaurant) and five samples of raw marinated chicken pieces (██████████ Ready to Cook Chicken Hind Saddles). All five raw chicken samples were collected from the marinated chicken bins stored inside the walk-in refrigerator (Exhibit B). The marinated chicken pieces were being stored at 40 °F or less. Labeling information on the opened cases of ██████████ Ready to Cook Chicken Hind Saddles confirmed that ██████████ was the supplier of the raw chicken (Exhibit C). Unopened cases of ██████████ Ready to Cook Chicken Hind Saddles were not located at the restaurant as all raw chicken inventory had been prepared and marinated earlier in the day.

At the completion of the EA, the environmental swabs and product samples were individually packed, placed in a cooler packed with gel icepacks, sealed with evidence tape, tagged with an evidence tag, and shipped via Golden State Overnight (GSO) for next-day delivery to FDLB. The samples were analyzed at FDLB for *Salmonella*.

Also, on October 24, 2019, FDB contacted ██████████ at the El Pollo Loco corporate office. FDB presented ██████████ with the current epidemiological findings and informed her of the ongoing EA at EPL #3510. FDB requested from ██████████ all planned corrective actions to eliminate *Salmonella* in the restaurant. ██████████ acknowledged FDB's notification and stated that the restaurant's owners would be notified immediately. ██████████ stated that

a third-party establishment would be hired to clean and sanitize the restaurant, and [REDACTED] would complete environmental testing at the restaurant.

After notifying management of the suspected foodborne outbreak, EPL #3510 management voluntarily closed the restaurant (October 24, 2019). The store reopened on November 22, 2019 after the completion of planned corrective actions and receipt of clearance testing granted by [REDACTED] (Exhibit D).

Traceback Investigation

On October 25, 2019, FDB initiated a traceback investigation to determine the source of the raw chicken samples ([REDACTED] Ready to Cook Chicken Hind Saddles) that were collected at EPL #3510 on October 24, 2019. The traceback investigation determined that [REDACTED] was the supplier of the raw chicken (Attachment 1).

Laboratory Results

On November 04, 2019, FDLB reported that *Salmonella* Thompson was detected in eleven environmental swabs (744102419-E007, -E008, -E009, -E010, -E039, -E044, -E045, -E046, -E057, -E058, and -E059) and one product sample (744102419-P002). The positive product sample was identified as [REDACTED] Ready to Cook Chicken Hind Saddles sourced from [REDACTED] that had been marinated by staff at EPL #3510. In addition, FDLB reported that two additional swabs (744102419-E014 and 744102419-E037) were presumptive positive for *Salmonella*. These two presumptive swabs were later confirmed positive for *Salmonella* Thompson on November 13, 2019 (Exhibit E).

On November 04, 2019, FDB shared the laboratory findings with [REDACTED] from the El Pollo Loco corporate office. In addition, FDB shared the traceback documents and laboratory results with the United States Department of Agriculture (USDA) Food Safety Inspection Service (FSIS) since [REDACTED] was a registered USDA facility.

FDLB performed whole genome sequencing (WGS) analysis on the *Salmonella* Thompson isolates that were recovered from the 13 environmental swabs and the one raw chicken sample. Comparison of the WGS results obtained with CDC's PulseNet database revealed that the sample isolates were closely related to the clinical isolates in the outbreak cluster (0-3 alleles; Attachment 2).

Corrective Actions

Management at EPL #3510 implemented several corrective actions between October 2019 and January 2020. The corrective actions included multiple mandatory food safety trainings for restaurant employees, several in-house and professional cleaning and sanitation activities at the restaurant, disposal of store inventory that was present prior to the EA and restocking the store with new supplies and inventory. In addition, environmental testing and monitoring was performed by third-party laboratories ([REDACTED]), equipment was removed and replaced (cutting boards, mops, squeegees, dust pans, and drain covers), a new stainless-steel cutting station was installed, and a new icemaker was purchased. On November 18, 2019, Mr. Liborio Alvarez, co-owner of El Pollo Loco at Barstow, submitted a complete list of all corrective actions performed at

Multistate Outbreak of *Salmonella* Thompson Associated with Chicken Served at an El Pollo Loco Restaurant in Barstow, California – August to September 2019

the restaurant (Exhibit D). On January 21, 2020, Mr. Alvarez notified FDB that the new stainless-steel cutting station had been installed.

Employee Testing

On November 07, 2019, SBCDPH, IDB, and FDB agreed to initiate testing of employees at EPL #3510. Although individual employees at the restaurant did not report symptoms of illness, there was a significant concern among the public health agencies that an employee(s) may be a carrier of the pathogen. Considering that employee testing conducted during the two prior *Salmonella* outbreaks at EPL restaurants (EPL #5425 – Irvine, California in 2019 and EPL #3500 – Modesto, California in 2018) identified several restaurant employees that tested positive for *Salmonella*, testing of EPL #3510 employees was regarded as necessary.

On November 08, 2019, SBCDPH initiated collection of specimens from ten EPL #3510 employees. The employees were prioritized for testing based on their job duties and likely exposure to potentially hazardous foods including raw chicken. Primary food handlers were tested first, followed by store managers and cashiers who occasionally handled food at the restaurant. Test results revealed that one employee at EPL #3510 was positive for *Salmonella* Thompson (Exhibit F). Furthermore, WGS analysis for the employee isolate matched the clinical isolates of the cases from the outbreak cluster by 0 alleles (Attachment 3). This employee was eventually added to the total case count for the outbreak.

The employee that tested positive for *Salmonella* Thompson was also reported to have been working a second job at another food facility in Barstow, California. In response to the positive test results this employee was excluded from all food handling operations until the completion of clearance testing for *Salmonella*.

Summary of Outbreak Investigation Findings

Epidemiological information collected during this investigation identified 15 individuals from California and Nevada that became ill after consuming chicken purchased from EPL #3510 in Barstow, California. Subsequent investigational work conducted by FDB and SBCPH identified multiple environmental samples that were closely related to the outbreak strain. Three of these environmental samples were collected from a knife and two cutting boards used at the cooked chicken cutting station. Chicken prepared at this station on October 24, 2019 would have been served to the public if the facility had not been voluntarily closed by EPL management. In addition, a sample of marinated chicken also tested positive for *Salmonella* Thompson.

The positive sample of marinated chicken and additional positive findings in both food-contact and non-food contact surfaces throughout the facility indicate a failure in the food safety system at EPL #3510. Evidence collected indicates that either undercooking and/or cross-contamination of cooked chicken products led to this outbreak.

Although management at EPL #3510 voluntarily closed the restaurant and initiated numerous corrective actions to eliminate *Salmonella* in their facility, effective and continued preventive practices will be necessary to avoid *Salmonella* contamination from reoccurring at this facility. A robust food safety plan including regular food safety trainings for employees, improved cleaning and sanitation procedures, and routine environmental testing are recommended practices for EPL #3510.

Attachments

- Attachment 1 - Traceback diagram - EPL #3510 Barstow
- Attachment 2 - WGS results for samples collected at EPL #3510, Barstow
- Attachment 3 - WGS results for employee at EPL #3510, Barstow

Exhibits

- Exhibit A - SBCDPH Inspection Report for EPL #3510, Barstow
- Exhibit B - Photos of chicken samples collected by FDB at EPL #3510, Barstow
- Exhibit C - Sample Evidence Receipt for samples collected by FDB at EPL #3510, Barstow
- Exhibit D - List of Corrective Actions provided by EPL #3510, Barstow
- Exhibit E - Summary of Positives for samples collected by FDB at EPL #3510, Barstow
- Exhibit F - Employee Test Results provided by SBCDPH