

Cyclosporiasis in Texas 2012-2017

Mid-Continental Association of Food and Drug Officials February 28, 2018



Objectives

- Discuss the history of Cyclosporiasis in Texas
 - Discuss the recent 2017 outbreak of Cyclosporiasis
 - Discuss challenges regarding the on-going seasonal outbreaks of Cyclosporiasis



2011 and Before

- Pre 2011 Texas had about 10 Cyclosporiasis cases per year
- Texas had 14 of cyclosporiasis cases in 2011
- Majority of cases reported travel outside of the US prior to illness



- 44 cases reported in Texas
- Restaurant outbreak of 9 cases
- Cilantro, cabbage, poblano pepper, lettuce, and tomato were considered suspect items
- Retrospective traceback indicated cilantro, likely sourced from Puebla, Mexico
- The TRRT did not activate this year. Focus on other outbreaks and food emergencies.

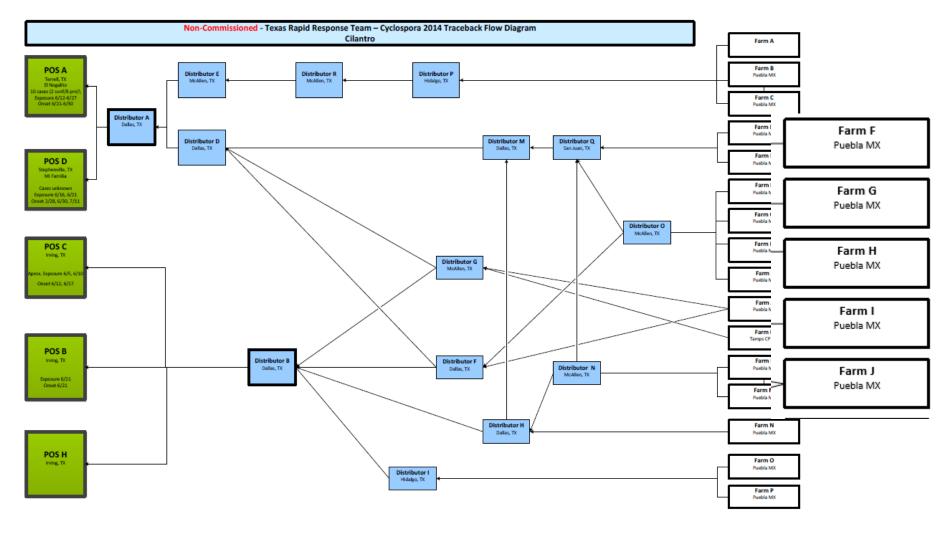


- 351 cases reported in Texas
- 270 outbreak associated cases
- Two concurrent national *Cyclospora* outbreaks
- Prepackaged salad from Guanajuato, MX
- Fresh cilantro from Puebla, MX
- TRRT activation for outbreak



- 200 cases reported in Texas
- 130 outbreak associated cases
- Fresh cilantro from Puebla, Mexico associated with some illnesses in Texas
- TRRT activation

Cyclospora 2014 Texas Traceback







- 316 cases reported in Texas
- 184 outbreak associated cases
- Fresh cilantro from Puebla, Mexico associated with some illnesses in Texas
- FDA import alert on cilantro from Puebla, Mexico, issued in late August
- TRRT activation



FDA Import Alert 24-23

(issued August 27, 2015)

 "DETENTION WITHOUT PHYSICAL EXAMINATION OF FRESH CILANTRO FROM THE STATE OF PUEBLA, MEXICO" -Seasonal (April 1 - August 30)



Reported Cyclosporiasis Case Counts and Incidence Rates in Texas, 2007-2016





- No large scale outbreak
- 120 cases reported in Texas in 2016*
- 48 outbreak associated cases* including restaurant outbreak of 6 cases
- Fresh cabbage and carrots considered suspect items
- TRRT did not activate. Relied heavily on Local and Regional partners to monitor cases of Cyclosporiasis.

Reported Cyclosporiasis Case Counts and Incidence Rates in Texas, 2007-2016

(with 2017 provisional data, as of 9/30/17)



Health and Human Services Texas Department of State Health Services



So What is up with Cyclosporiasis?

| Cyclosporasis 2013-2017 | | | | | |
|-------------------------|----------------|------------------|--------------|--|--|
| Year | Texas Cases | Nationwide Cases | No of States | | |
| 2013 | 351 | 631 | 25 | | |
| 2014 | 200 | 304 | 19 | | |
| 2015 | 316 | 546 | 31 | | |
| 2016 | 148 | 314 | 28 | | |
| 2017 | 281* | 1065** | 40 | | |

*As of September 30, 2017 **As of October 4, 2017

3/29/2018

Source: https://www.cdc.gov/foodsafety/outbreaks/multist ate-outbreaks/outbreaks-list.html



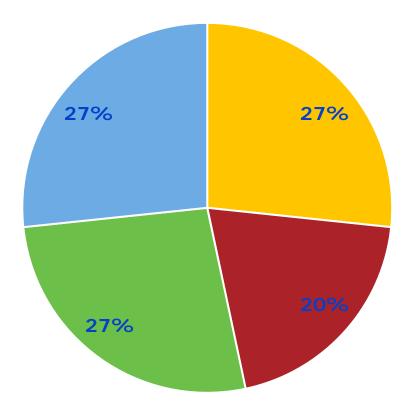
Recent Outbreaks

| Year | Jurisdiction(s) | # cases | Vehicle | Source of vehicle |
|------|----------------------------------|------------|-----------------------|-------------------|
| 2012 | Texas | 16 | Cilantro (suspect) | MX (suspect) |
| 2013 | lowa & Nebraska | 161 | Bagged salad mix | Guanajuato, MX |
| 2013 | Texas | 38 | Cilantro | Puebla, MX |
| 2014 | Texas | 26 | Cilantro | Puebla, MX |
| 2015 | Georgia, Texas, and Wisconsin | 90 | Cilantro | Puebla, MX |
| 2016 | Texas | 15 | Undetermined | |
| 2017 | Texas | Tbd | Undetermined | |



- As of 9/30/17, 281 lab-confirmed reports of *Cyclosporiasis* received at DSHS Central Office in 2017
 - 174 domestically acquired cases (no travel outside US or Canada)
 - 23 cases pending investigation
- 16 potential clusters being monitored

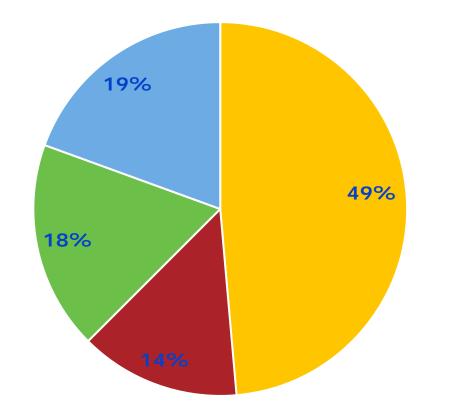
2017 Cyclosporiasis Outbreak - Texas Main Cluster Types



Mediterranean Asian Mexican Other



2017 Cyclosporiasis Outbreak - Texas Percentage of Case Patients by Cluster Type



Mediterranean Asian Mexican Other





Case Control Study

- HSR 6/5s (Houston/Harris Co/Fort Bend Co area) large restaurant cluster identified of 30+ cases
 - CDC Epi-Aid assisted
 - Case control study completed
 - An ingredient was identified as significantly associated illness

Could not relate ingredient on statewide or nationwide level



Cyclospora Challenges

- Limited Resources
- Not easily detectable in food
- Limited molecular subtyping methods
- Ingredient driven
- Little convergence of suspect foods statewide and nationwide
- Additional investigation needed to determine causes of resurgence



Final Thoughts



Contact Information

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Questions?

3/29/2018