

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.

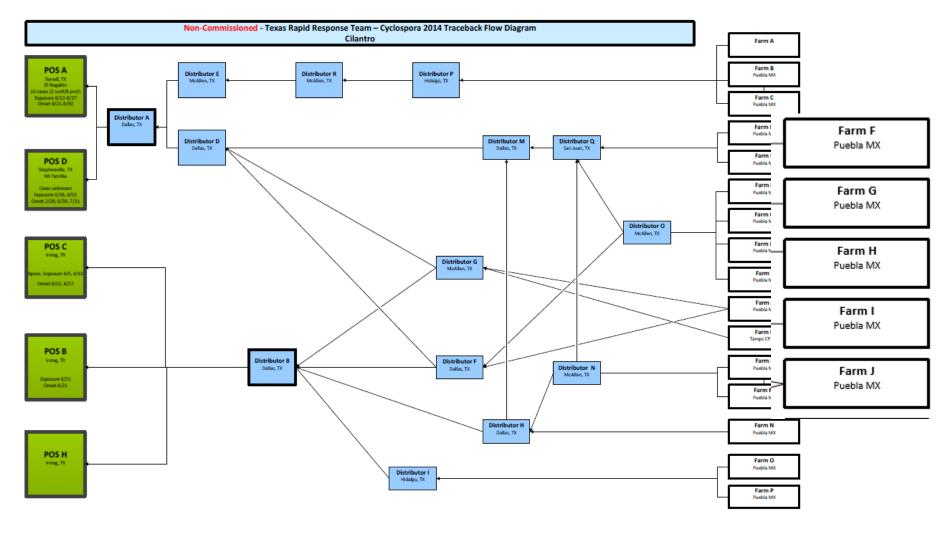


- 351 cases reported in Texas
- 270 outbreak associated cases
- Two concurrent national *Cyclospora* outbreaks
- Prepackaged salad from Guanajuato, MX
- Fresh cilantro from Puebla, MX
- TRRT activation for outbreak



- 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



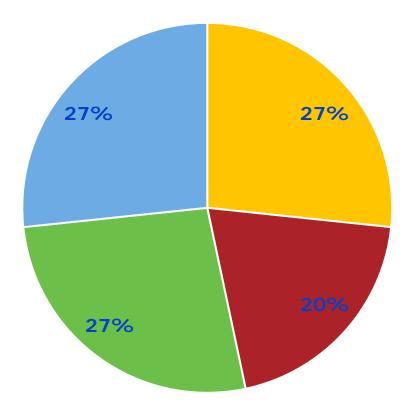
Recent Outbreaks

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

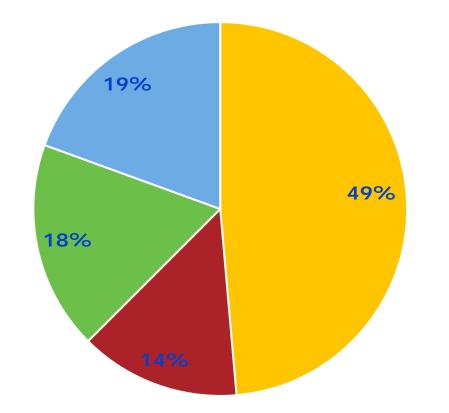
2017 Cyclosporiasis Outbreak - Texas Main Cluster Types



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

Julie Loera Food Safety Officer Texas Department of State Health Services Tel: 512-834-6770 ext 2342 Julie.loera@dshs.texas.gov



Questions?

3/29/2018