



Legionnaires' Disease Outbreak Update

Presented by

Jennifer Mullendore, MD, MSPH
BCHHS Medical Director



BUNCOMBE COUNTY



Legionnaires' Disease Overview

- Form of pneumonia (lung infection) caused by the *Legionella* bacteria
- Most healthy people exposed to *Legionella* do not get Legionnaires' disease
- Higher risk groups:
 - 50 years of age and older
 - Current or former smokers
 - Chronic lung disease or weak immune systems
- Spread through breathing in tiny water droplets containing the *Legionella* bacteria
- *Legionella* bacteria found naturally in freshwater
- Can become a health concern when it grows and spreads in manmade water systems (cooling towers, hot tubs, decorative fountains)



Working with Partners during Disease Outbreak Investigation

Buncombe County Health and Human Services (BCHHS), like all local health departments in NC, investigates suspected cases of reportable communicable diseases in residents of our county.

NC DPH conducts statewide surveillance of diseases/conditions and provides technical assistance and support when event expands beyond a single county.

BCHHS Communicable Disease Investigations

<u>Fiscal Year</u>	<u># Reported Cases</u>	<u># Confirmed Cases</u>
FY18	3510	2032
FY19	3040	2392
FY20 (through 10/14/19)	1109	679

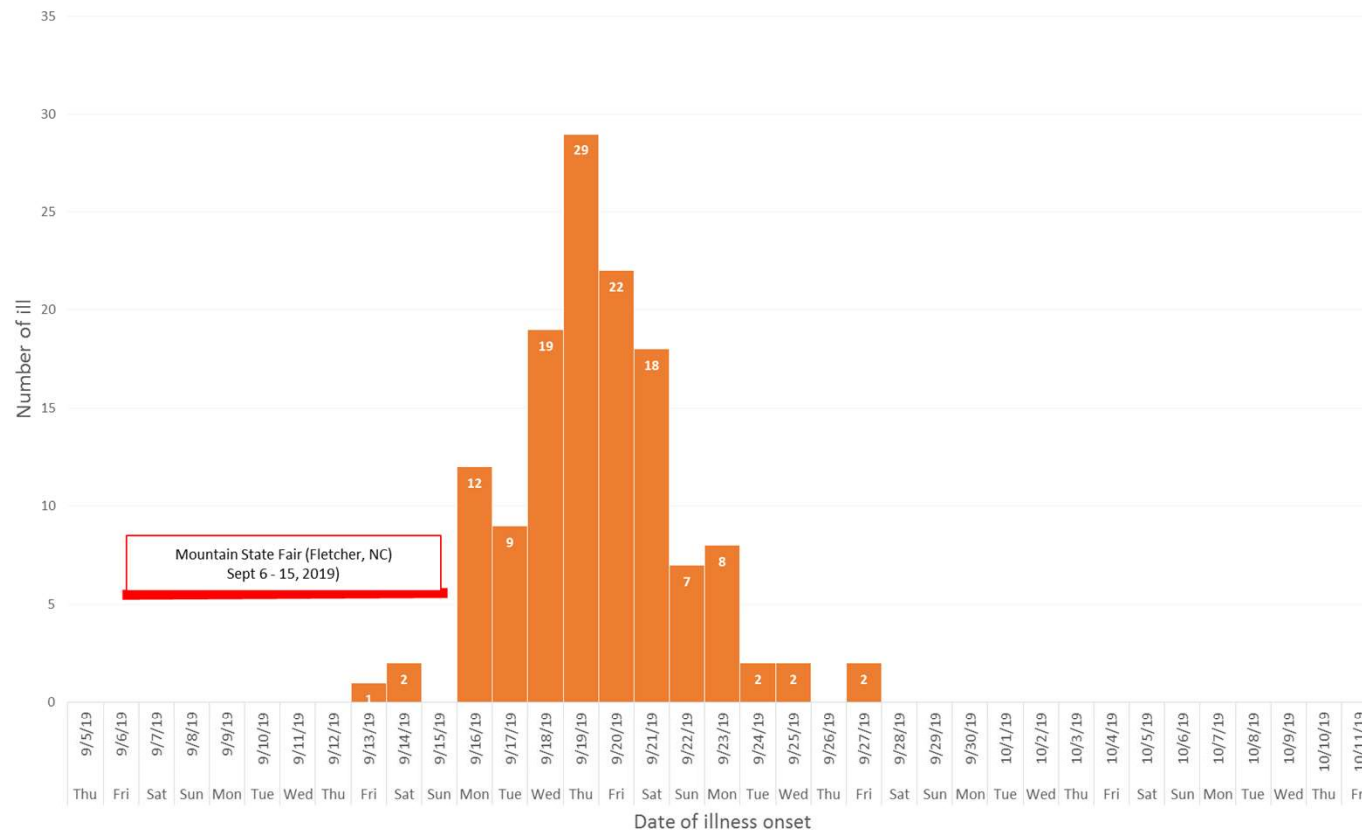


Overview of Timeline

- Friday
9.20.19**
- Single case of Legionnaires' disease reported to BCHHS by local medical provider
- Sunday
9.22.19**
- 3 additional suspected cases of Legionnaires' reported by local medical provider
 - Due to the severity of illness, unable to interview these individuals until the next morning
- Monday
9.23.19**
- BCHHS notified NCDPH of the cluster of Legionnaires' disease & conducted interviews
 - NCDPH discovered possible link to Mountain State Fair
 - BCHHS was able to confirm fair attendance & shared this with NCDPH
- Tuesday
9.24.19**
- BCHHS sent alert about increase in Legionellosis infections to local medical providers
 - NCDPH issued case definitions for outbreak
 - NCDHHS issued press release stating multi-county outbreak of Legionnaires' disease with possible link to fair



Confirmed Legionellosis events linked to the NC Mountain State Fair outbreak by date of illness onset (n = 133*)
as of COB 10/09/19



Interim Report: Outbreak of Legionnaires' disease associated with the NC Mountain State Fair, September – October, 2019

*Does not include 1 confirmed case missing an illness onset date



BUNCOMBE COUNTY



Outbreak Characteristics (as of 10/14/19)

Male	79 (57%)
Female	59 (43%)
Median age in years (range)	61 (24-91)
Admitted to Hospital	94 (69%)
Deaths	3 (2.1%)
Legionnaires' Disease	132 (94%)
Pontiac Fever	8 (6%)
Total # of confirmed cases as of 12pm on 10.14.19	140*

*Buncombe County has reported 51 confirmed cases to NCDPH as of 12pm on 10/15/19



BUNCOMBE COUNTY





Questions?

Presented by

Jennifer Mullendore, MD, MSPH
BCHHS Medical Director



BUNCOMBE COUNTY

