



Texas Department of State
Health Services

Texas Mumps Counts and Outbreaks

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Mumps in Texas



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- Recent surge in mumps cases
 - 312 cases in 2008-2015
 - Median of 20 cases per year
 - 191 cases in 2016
 - 150 cases with onset between 11/1 and 12/31
- 400 cases in 2017*
 - Most mumps cases in one year since 1990

* Data provisional as of 9/27/2017
Slide courtesy of Charles Cohlmia

Mumps in Texas*



- 550 cases reported with onset of illness on or after 11/1/2016
- Cases have been identified in 39 counties
- Age range is from 10 months – 80 years old
 - Median age: 20 years old
 - 236 (43%) are 18 years of age or younger

* Data provisional as of 9/27/2017
Slide courtesy of Charles Cohlma

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Mumps in Texas*



- 550 cases reported with onset of illness on or after 11/1/2016
- Of the 550 cases, 476 (87%) had a known vaccination status
 - Of the 476 case-patients, 398 (84%) report being vaccinated

* Data provisional as of 9/27/2017
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Vaccination Status by Age Group, Texas, 2016-2017*



Vaccinated?	≤ 18 years of age N / (Column %)	18 years of age N / (Column %)
Yes	218 / (92.4)	180 / (57.3)
No	13 / (5.5)	65 / (20.7)
Unknown	5 / (2.1)	69 / (22.0)

* Data provisional as of 9/27/2017
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Mumps in Texas*



- 550 cases of mumps since 11/1/2016
 - 362 (64%) are outbreak related
 - Divided among 15 outbreaks
 - Largest outbreak: Johnson County – 191 cases
 - Smallest outbreak: Amarillo, Texas – 2 cases
 - 188 cases denoted as not being associated with an outbreak

* Data provisional as of 9/27/2017
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Johnson Co. Mumps Outbreak: Detection

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Outbreak in Johnson County?

- Call received-local IP
- 3 cases of parotitis, possible mumps
- Possibly same school district?

**Saturday 11/19/2016:
Initial Cases Reported**

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Outbreak in Johnson County?

- Case #1
 - 10 year old female, Hispanic
 - Earache, sore throat, swelling by ear and jaw
 - Fully vaccinated, IgM pending
- Case #2:
 - 14 year old male, White, non-Hispanic
 - Left-sided swelling after football
 - Fully vaccinated, IgM pending

Saturday 11/19/2016:
Initial Cases Reported

Monday 11/21/2016:
Review of Cases

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Outbreak in Johnson County?

- Case #3:
 - 17 year old male, Hawaiian/Pacific Islander
 - Left-sided swelling, pain eating, fever
 - Vaccination-Marshall Islands
 - Transferred to another hospital: non-mumps DX
 - Interview pending

**** No travel/Ill contacts**

**** ONSETS for all within 2-3 days**

**** Different Schools**

Saturday 11/19/2016:
Initial Cases Reported

Monday 11/21/2016:
Review of Cases

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Outbreak in Johnson County!!

- Case #4 and #5
 - 8 year-old males
 - Parotitis/Mumps exposure
 - Hispanic and "Multi-racial"
 - Same elementary school
 - IgM pending
 - No travel



Saturday
11/19/2016: Initial
Cases Reported

Monday
11/21/2016:
Review of Cases

Tuesday
11/22/2016: Two
More Cases
Reported

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Outbreak in Johnson County!!

- Weeklong School Closure
- Mumps PCR
 - Testing awareness
 - State Lab- holiday/Zika delay
- 4/5 cases were provided awareness



Saturday
11/19/2016:
Initial Cases
Reported

Monday
11/21/2016:
Review of
Cases

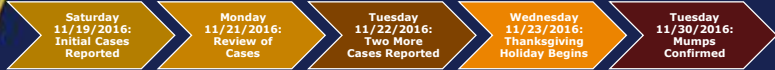
Tuesday
11/22/2016:
Two More
Cases Reported

Wednesday
11/23/2016:
Thanksgiving
Holiday Begins

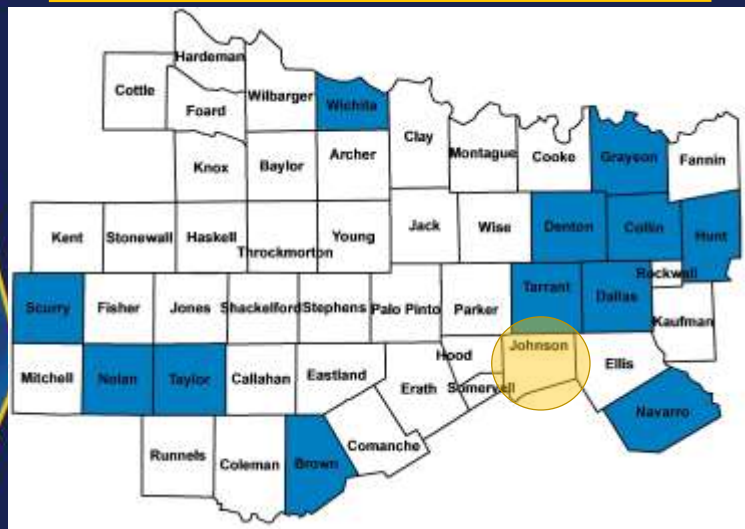
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Outbreak in Johnson County!!

- School reports more cases
 - Marshallese population
- Case #3-AR travel
- Four of six case confirmed
- Prevention and control!!!



Johnson County: Overview





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Mumps Outbreak: Data Summary

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Mumps: Trends

Texas/Regional Mumps

YEAR	TEXAS	HSR 2/3
2015	20	6
2014	15	6
2013	13	1
2012	15	5
2011	68	9



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Johnson Co. Outbreak

Counts as of 6/05/2017

Case Count		%
Confirmed	117	61%
Probable	74	39%
TOTAL	191	100%

Genotype G

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Johnson Co. Outbreak

Vaccine Status of Cases

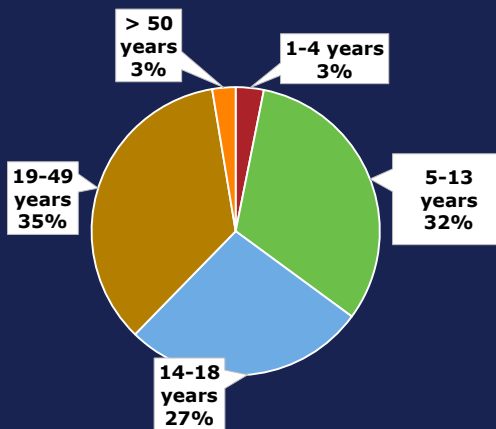
MMR Vaccine Doses		%
0 Doses	12	6%
1 Dose	8	4%
2 Doses	114	60%
3 Doses	0	0%
Unknown	57	30%
TOTAL	191	100%

No serious complications!

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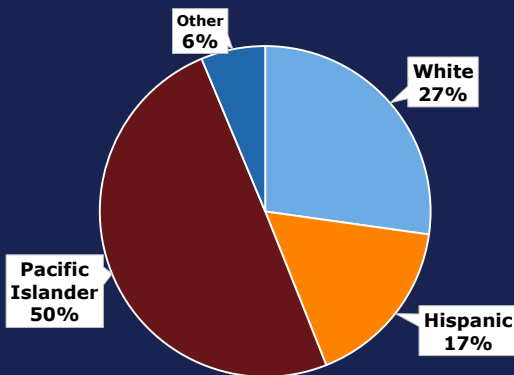
Johnson Co. Outbreak

Age Distribution

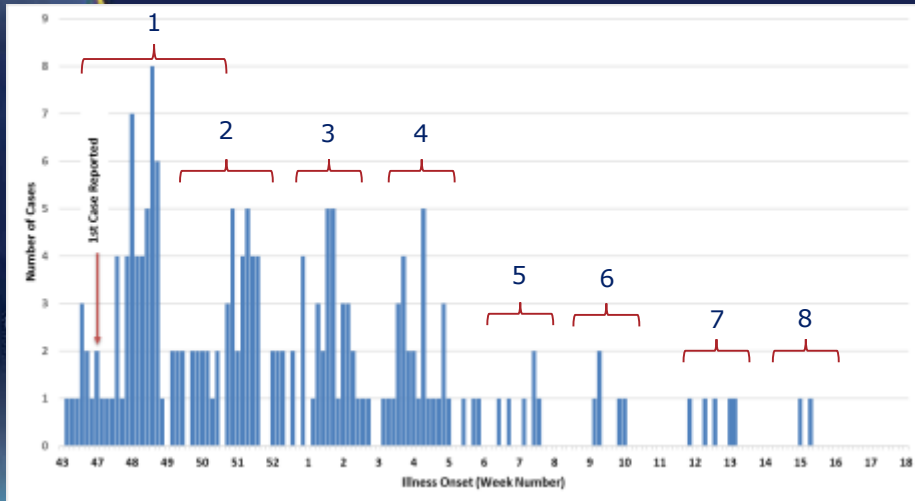


Johnson Co. Outbreak

Race/Ethnicity Distribution



Johnson Co. Outbreak: Epidemic Curve



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Mumps Outbreak: Control and Prevention

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Response: Internal Structure

- Staff Meeting
 - 2X/day-weekly
 - Regional
Epis/imms/administration/PH
nurses/LHA/preparedness/VPD Epis
- Action Items
 - Case
review/status/settings/jurisdictions
 - Field Work/Testing
 - Database/Line list
 - Communications
 - Other "non-mumps" cases



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Response: Stakeholder Outreach

- In-Person Meetings
 - EOC/media
- Mumps Outbreak Summary
 - Daily-weekly
- Regional LHD Calls
 - Weekly-monthly



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Other Regional Outbreaks

- Dallas Co
 - 2 outbreaks
- Tarrant Co
 - 1 outbreak
- Multi-county outbreak
- Multi-state outbreak with Texas cases



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Response: Community Outreach

- AR insight/Input- IMPORTANT!
- Community/Church
 - Awareness/immunizations
 - Liaisons/Missionaries
- Worksites
 - Awareness/immunizations
 - Exclusions
- Field work
 - Flexible!
 - PH nurses testing/immunizations
- Advisories/website



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Response: School Districts

- Schools
 - Awareness Letters
 - Affected districts/surrounding districts- sports
 - Immunizations review
 - Exclusion
 - Daily-Weekly communication
 - Case reporting
 - Case status



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Response: Healthcare Providers

- Healthcare Provider Exposure
 - Outreach/Recommendations
 - Furlough
- Awareness/Advisories
 - Reporting
 - Testing
- Regulatory Agency Notification



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Response: Immunization Clinics

- Schools
 - Both of the heavily affected school districts held vaccination clinics
- Worksites
 - One worksite held an onsite clinic
 - One worksite provided specified time off for employees to go get immunized
- Church
- Of note, we have a field office within one of the affected cities which provided immunizations 5 days a week

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Mumps Outbreak: Lessons Learned

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Lessons Learned

- Community Insider- MUST!!
- HAI Epidemiologist- Indispensable
- Schools- Extended Exclusion Plans
- Vaccine Objectors Documents
- Reporting- 1 day vs. 1 week
- Vaccine Works!!



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Thank you

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