

Vaccine Preventable Diseases and Outbreaks

Satellite Conference and Live Webcast
Wednesday, July 26, 2017
2:00 – 3:30 p.m. Central Time

Produced by the Alabama Department of Public Health
Distance Learning and Telehealth Division

Faculty

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Mumps



Mumps

- Is a contagious disease caused by a virus
- It is spread from person-to-person via direct contact or by droplets of saliva from the mouth, nose, or throat of an infected person when they cough, sneeze, or talk

Mumps

- It may also spread when the infected person touches items or surfaces without washing their hands, or touches contaminated surfaces and then their mouth or nose

Signs and Symptoms

- Usually appear 2 to 3 weeks after exposure
- Causes parotitis (swelling in the jaw / puffy cheeks)
- Fever
- Headache
- Muscle aches
- Tiredness
- Loss of appetite



Possible Complications

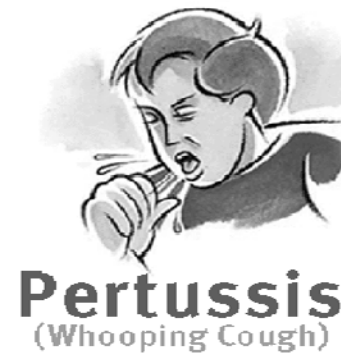
- Orchitis
- Encaphilitis
- Meningitis
- Oophoritis
- Deafness

Prevention

- Preventable by 2 dose of the mumps vaccines
- Mumps vaccine can be given separately or as part of the MMR that also protects against measles and rubella

Specimen

- Preferred specimen: Buccal Swab
 - To diagnose mumps, a swab is taken from inside the patient's cheek



Pertussis (Whooping Cough)

- A highly contagious respiratory disease caused by bacteria
- Spread from person-to-person by coughing or sneezing
- Infected person are most contagious up to 2 weeks after the cough begins

Signs and Symptoms

- Minimal or no fever
- Runny nose
- Sore throat
- Mild, dry cough (can continue for months)
 - Becomes severe within 1 to 2 weeks

Signs and Symptoms

- Resulting in a long series of coughs followed by a whooping noise as the person struggles to breathe and/or vomiting
- The cough is often worse at night

Prevention

- Preventable by the pertussis vaccine
- Preventive antibiotics are also used in those who have been exposed and are at high risk of pertussis

Specimen

- Preferred specimen: Nasopharyngeal aspirate for PCR testing

Varicella



Varicella

- Also known as “Chickenpox”
- A highly contagious viral disease caused by the varicella-zoster virus
- It’s an airborne disease which spreads through the coughs and sneezes of an infected person

Varicella

- May spread 1 to 2 days before the rash appears until all lesions have crusted over or through direct contact with blisters
- A person with shingles can also spread chickenpox

Signs and Symptoms

- Blister-like rash
- Itching
- Fever
- Headache
- Tiredness
- Malaise

Prevention

- Preventable by the varicella vaccine
- Vaccinating within 3 days reduces the infection rate and severity

Specimen

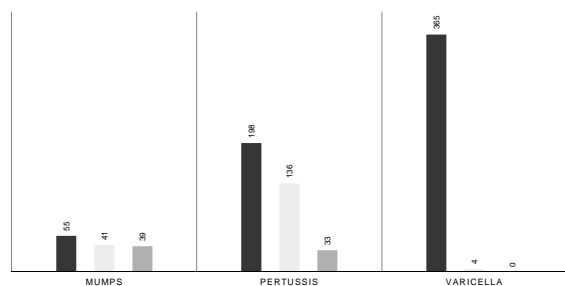
- Preferred specimen: Lesion / Scab for PCR testing

Investigations and Outbreaks

Total Investigations

TOTAL INVESTIGATIONS JAN. 1 - JULY 1, 2017

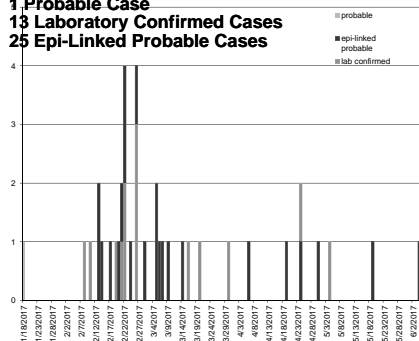
■ Total of Investigations ■ Total of Cases ■ Total of Cases Associated w/Outbreak



Mumps Outbreak (Tuscaloosa County)

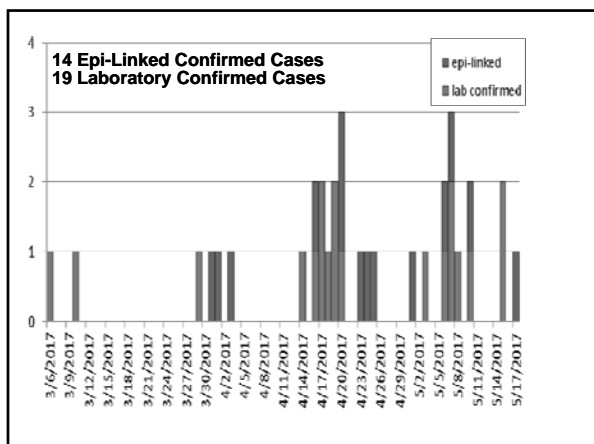
- Out of the 39 total ill, 39 (100%) were up-to-date (UTD)
- 9,672 people exposed
 - 500 completed mumps questionnaire
 - 57 others reported ill with
 - Different diagnose (flu, strep throat, mono, and/or tonsillitis)
 - Tested negative for mumps

1 Probable Case
13 Laboratory Confirmed Cases
25 Epi-Linked Probable Cases



Pertussis Outbreak (Chambers County)

- Out of the 33 total ill, 19 (58%) were up-to-date (UTD) and 14 (42%) not UTD
- 1,729 people exposed, 1,203 immunization histories were looked up in ImmPRINT, 1,075 (89%) were UTD, 128 (11%) N-UTD



Specimen

As requested by Assistant State Health Officer, Dr. Karen Landers, all County Health Department Nurses should be trained to obtain the 4 specimens for VPDs (blood, buccal, nasal pharyngeal aspirate, and lesion)

Once specimen is obtained it should be packaged according to standards and ship to the BCL according to the specimen requirements