Mumps Outbreak associated with the College of Charleston

Summary
The outbreak of mumps associated with the College of Charleston has seen a decrease in cases. Although no confirmed cases have been reported among College of Charleston students in recent weeks, there are cases presenting in the surrounding communities. DHEC is sending this update to encourage providers to consider PCR buccal swab testing in all patients who present with symptoms consistent with mumps. Diagnostic tests and vaccination recommendations are also reviewed as healthcare providers in the Charleston area may continue to see individuals with symptoms suggestive of mumps.

Background
Mumps is a viral illness transmitted by respiratory droplets. Incubation period ranges from 12-25 days. Infected individuals are typically contagious two days prior to parotitis onset until five days after. The most common complication in the post-vaccine era is orchitis. Less common side effects include mastitis, oophoritis, pancreatitis, deafness, meningitis, and encephalitis. A total of 81 individuals associated with the College of Charleston have been diagnosed since September 17, 2019. Forty additional cases without a clear connection to the College of Charleston have also been diagnosed in the community.

In November 2019, DHEC recommended additional protection in the form of a third dose of MMR for all students participating in social activities connected to fraternities and sororities. In addition, any other students, faculty, or staff who wished to receive an additional dose were advised to do so.

Recommendations

Patient Evaluation and General Precautions
DHEC advises the following:
Area healthcare providers should consider mumps in patients presenting with parotitis – tender swollen glands below the ear and along the jawline on one or both sides of the face and neck. Other associated symptoms can include:

- Influenza- or cold-like illness
- Headache
- Fever
- Muscle aches
- Fatigue
- Loss of appetite
- Testicular swelling
- Pelvic pain

Patients suspected to have mumps should be evaluated by providers who have received the MMR vaccine and using droplet precautions.

Encourage patients of the following:

- **Practice preventative measures**, such as good hand hygiene, cover coughs and sneezes, and avoid direct contact with saliva (e.g., kissing and sharing personal items such as toothbrushes, bottles/cups and tobacco products).
- Individuals suspected to have mumps should self-isolate for five days from symptom onset pending confirmation of the diagnosis.

Avoid close contact with people who are sick and stay home if sick to prevent infecting others.

**Vaccination**

For the general population, ensure patients have received two doses of MMR vaccine. One dose is approximately 78% effective, and two doses are about 88% effective. A third dose is recommended only for individuals who are part of a group that has been identified as being at risk for ongoing transmission. A third dose is not recommended for the general population.

**Diagnostic Testing**

Other upper respiratory infections may have a clinical presentation similar to mumps. Mumps RT-PCR by buccal swab (offered by commercial labs and DHEC’s Public Health Laboratory) is optimal for mumps diagnosis. An NP swab for respiratory biofire panel testing is also recommended to detect other respiratory viruses that are circulating this time of year.

In the setting of a third dose of MMR, buccal PCR test results may be difficult to interpret, but this is still the diagnostic test of choice when a patient presents with signs and symptoms suggestive of mumps. DHEC will be able to assist in determining whether positive results following a third dose of MMR are a true positive based on history and time course. Note that the MMR vaccine itself causes parotitis in less than 1% of cases.
Additional Resources

CDC mumps Information for Healthcare Providers: [cdc.gov/mumps/hcp.html](https://cdc.gov/mumps/hcp.html).

DHEC contact information for reportable diseases and reporting requirements

Reporting of mumps is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2020 List of Reportable Conditions available at: [www.scdhec.gov/sites/default/files/Library/CR-009025.pdf](http://www.scdhec.gov/sites/default/files/Library/CR-009025.pdf).

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

### Regional Public Health Offices – 2020

Mail or call reports to the Epidemiology Office in each Public Health Region

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<td>Fax: (803) 576-2993</td>
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**For information on reportable conditions, see**

[https://www.scdhec.gov/ReportableConditions](https://www.scdhec.gov/ReportableConditions)

Categories of Health Alert messages:

- **Health Alert**: Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: Provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: Provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Info Service**: Provides general information that is not necessarily considered to be of an emergent nature.