



# This is an official DHEC Health Update

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## Mumps Outbreak at College of Charleston

## **Summary**

The College of Charleston has ongoing mumps transmission in the setting of an outbreak that was announced on September 23, 2019. DHEC is sending this Health Update to provide information about the ongoing outbreak and new recommendations for a third dose of vaccine.

A total of 52 individuals associated with the College of Charleston have been diagnosed with mumps since September 17, 2019. Due to concern over the number of cases among individuals participating in sorority and fraternity-sponsored activities, DHEC and the CDC have recommended additional protection in the form of a third dose of MMR for all students participating in these social activities. Other students, faculty, or staff who wish to receive an additional dose may also seek to do so.

Five additional cases without a clear connection to the College of Charleston have also been diagnosed in the community. Healthcare providers in the Charleston area may be consulted about vaccination recommendations or they may see individuals with symptoms suggestive of mumps requiring diagnostic evaluation.

## **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 52 individuals associated with the College of Charleston have been diagnosed with mumps since September 17, 2019. Five additional cases without a clear connection to the College of Charleston have also been diagnosed in the community.

College administration has provided mumps vaccination services for students and staff that did not have documentation of current measles, mumps and rubella (MMR) vaccination. The College of Charleston has also advised their faculty and staff of symptoms to be aware of and of precautions to take to prevent continued transmission.

#### 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.

Please 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**

Due to the increasing number of cases among individuals participating in sorority and fraternity-sponsored activities, DHEC and the CDC recommend additional protection in the form of a third dose of MMR for all students participating in these social activities. Any other students, faculty, or staff who wish to receive an additional dose may also seek to do so.

Epidemiologic studies have shown that in the setting of sustained and prolonged mumps outbreaks, a third dose of vaccine can help to interrupt transmission. The increased immunity is for a limited period with immunity returning to baseline levels about one year after the third dose. MMR vaccine will not prevent people from contracting mumps if they are already infected at the time of vaccine administration.

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.

## 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 2019 List of Reportable Conditions available at: <a href="https://www.scdhec.gov/sites/default/files/Library/CR-009025.pdf">www.scdhec.gov/sites/default/files/Library/CR-009025.pdf</a>.

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 – 2019  Mail or call reports to the Epidemiology Office in each Public Health Region			
MAIL TO:			
Lowcountry	Midlands	Pee Dee	Upstate
4050 Bridge View Drive, Suite 600	2000 Hampton Street	145 E. Cheves Street	200 University Ridge
N. Charleston, SC 29405	Columbia, SC 29204	Florence, SC 29506	Greenville, SC 29602
Fax: (843) 953-0051	Fax: (803) 576-2993	Fax: (843) 915-6502	Fax: (864) 282-4373
CALL TO:			
Lowcountry	Midlands	Pee Dee	Upstate
Berkeley, Charleston, Dorchester	Kershaw, Lexington, Newberry,	Chesterfield, Darlington, Dillon,	Anderson, Oconee
Phone: (843) 953-0043	Richland	Florence, , Marion, Marlboro	Phone: (864) 260-5581
Nights/Weekends: (843) 441-1091	Phone: (803) 576-2749	Phone: (843) 661-4830	Nights/Weekends: (866) 298-4442
	Nights/Weekends: (888) 801-1046	Nights/Weekends: (843) 915-8845	
Beaufort, Colleton, Hampton, Jasper			Abbeville, Greenwood,
Phone: (843) 549-1516 ext. 218	Chester, Fairfield, Lancaster, York	Clarendon, Lee, Sumter	McCormick
Nights/Weekends: (843) 441-1091	Phone: (803) 286-9948	Phone: (803) 773-5511	Phone: (864) 260-5581
	Nights/Weekends: (888) 801-1046	Nights/Weekends: (843) 915-8845	Nights/Weekends: (866) 298-4442
Allendale, Bamberg, Calhoun, Orangeburg Phone: (803) 268-5833	Aiken, Barnwell, Edgefield, Saluda Phone: (803) 642-1618	Georgetown, Horry, Williamsburg	Cherokee, Greenville, Laurens Pickens, Spartanburg, Union
Nights/Weekends: (843) 441-1091	Nights/Weekends: (888) 801-1046	Phone: (843) 915-8800 Nights/Weekends: (843) 915-8845	Phone: (864) 372-3133 Nights/Weekends: (866) 298-4442
DHEC Bureau of Communicable Disease Prevention & Control			

For information on reportable conditions, see <a href="https://www.scdhec.gov/health-professionals/report-diseases-adverse-events/south-carolina-list-reportable-conditions">https://www.scdhec.gov/health-professionals/report-diseases-adverse-events/south-carolina-list-reportable-conditions</a>

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