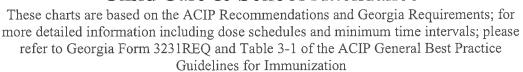


Summary of Georgia Immunization Requirements for Child Care & School Attendance





Required Number of Doses for Children Who Started Immunizations before Age 7 Years

Required	2	4	6	12	15	18	24	4-6	5-6 yrs of age	
Vaccines	mos	yrs	Total Doses Required for School Entry							
DTP, DT, DTaP	1	2	3		4			5	4 or 5 (if 4 th dose given on or after 4 th birthday, 5 th dose is not needed)	
Нер В	1	2	3						3	
Hib (ActHIB, Hiberix, or Pentacel)	1	2	3	4	1				Required for	
or Hib *(PedvaxHIB)	1	2		3					Child Care and Pre-K only	
**Polio	1	2	3					4	3 or 4 (4th dose of polio on or after 4th birthday required for children born on or after 1-1-06)	
***MMR				1				2	2	
Varicella				1				2	2	
PCV	1	2	3	4	1				Required for Child Care & Pre-K only	
Нер А					1		2		2 Required for children born on or after 1-1-06	

^{*}If PedvaxHIB is administered at ages 2 and 4 months, a dose at 6 months is not indicated.

Required Number of Doses for Children Who Started Immunizations after Age 7 Years

Required Vaccines	First Visit	1 Mo After 1 st Dose	1 Mo After 2 nd Dose	1 Mo After 3 rd Dose	4 Mo After 1 st Dose	6 Mo After Previous Dose	Total Doses Required
Hep B	1	2			3		3
**Polio	1	2	3			3 or 4	3 or 4
***MMR	1	2					2
Varicella	1	2					2
****Tdap/Td	1(Tdap)	2(Td/Tdap)				3(Td/Tdap)	33
****MenACWY	1 (11-12 yrs)	1 (≥16 yrs)					2

^{*}If child received 2 doses of adult Recombivax-HB 10 mcg between the ages of 11-15 yrs. and the doses are separated by at least 4 months, a 3rd dose is not needed.

^{**}The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose. If 4 doses are administered prior to age 4 years a fifth dose should be administered at age 4 through 6 years. (MMWR 2009; 58(30):829-30).

^{***}State requirement is for 2-doses each of measles and mumps, and 1 dose of rubella vaccine. Second dose may be given before age 4 years, provided at least 4 weeks have elapsed since first dose.

^{**} The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose. A 4th dose is not necessary if the 3rd dose was administered at age 4 years or older and at least 6 months after the previous dose.

^{***} State requirement is for 2-doses each of measles and mumps, and 1 dose of rubella vaccine.

^{****}State requirement is for 1-dose of Tdap booster for 7th grade entrance; Td or Tdap is recommended for remaining additional doses to complete series. DTaP given at age 7 through 9 years may count as part of the catch-up series. An inadvertent dose of DTaP given at age 10 through 18 years can count as the adolescent Tdap booster dose.

^{*****} State requirement is for 1-dose of MenACWY for 7th grade entrance and 1-dose for 11th grade entrance on or after 16th birthdate; minimum 8-week interval between doses.



Brenda Fitzgerald, MD, Commissioner | Nathan Deal, Governor

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Health Advisory: Mumps

Georgia Department of Public Health Requests Reports of Suspect Mumps Cases

Action Steps:

Local health departments: Please forward to hospitals and clinics in your jurisdiction.

Hospitals and clinics: Please distribute to infectious disease doctors, infection preventionists, emergency department physicians, intensive care physicians, neurologists, radiologists, primary care providers, and pediatricians.

Summary

Mumps is a contagious viral infection characterized by the acute onset of unilateral or bilateral, tender swelling of parotid or other salivary glands, often proceeded by a nonspecific prodrome, which may include muscle aches, loss of appetite, malaise, headache, and fever. An estimated 30% of mumps infections may be asymptomatic or manifest primarily as a respiratory infection. In recent U.S. outbreaks, complications of mumps have included orchitis in up to 10% of adolescent and adult males, and oophoritis in ≤1% of adolescent and adult females. More rarely pancreatitis, meningitis, encephalitis, and deafness has occurred.

Mumps is spread by contact with infectious respiratory tract secretions and saliva. The incubation period is typically 16 to 18 days but can range from 12 to 25 days. In recent mumps outbreaks, the majority of cases had received two doses of MMR vaccine. Therefore, a history of appropriate vaccination does not rule out mumps in persons with compatible symptoms.

Background

As of December 31, 2016*, 5,151 mumps cases have been reported to the Centers for Disease Control and Prevention (CDC) – the highest number reported nationally since 2006 when 6,584 cases were reported. Many of these cases have been associated with outbreaks in college/university settings. These outbreaks, mostly affecting young vaccinated adults, have ranged in size from a few to several hundred cases, and are likely due to a combination of factors including the intensity of the exposure setting (college campus) coupled with behaviors that increase the risk of transmission, a lack of previous exposure to wild-type virus, and possible waning immunity.

Sixteen mumps cases[†] were reported to the Georgia Department of Public Health (DPH) during 2016.

Reporting

Mumps is a notifiable disease and suspect mumps cases should be reported to the Georgia Department of Public Health (O.C.G.A. §31-12-2) as soon as possible. Report suspect cases to public health by calling your local District Health Office or the DPH Acute Disease Epidemiology Section at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH after-hours on evenings and weekends. <u>Do not await laboratory results before reporting.</u>

Laboratory Testing

The preferred method for confirming acute mumps infection is detection of mumps virus from a buccal specimen by reverse transcriptase-polymerase chain reaction testing (RT-PCR). Collection of a buccal specimen within 1 to 3 days of parotitis onset is optimal, although virus may be detected for up to 9 days. Prior to obtaining the specimen, the parotid gland, which extends from in front of the ear to the angle of the jaw, should be massaged for 30 seconds. Detailed specimen collection guidance is available at the DPH mumps website.



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Date: January 10, 2017

To: Georgia Universities and Colleges **From:** Georgia Department of Public Health

Mumps Advisory for Colleges and Universities

Summary

In 2016, 5,311 mumps cases were reported to CDC, the highest number of cases in the U.S. since 2006 when 6,584 were reported. Many of these cases were associated with outbreaks in college/university settings. These outbreaks have ranged in size from a few to several hundred cases, are primarily among vaccinated individuals, and are likely due to a combination of factors including the intensity of the exposure setting coupled with behaviors that increase the risk of transmission, a lack of previous exposure to wild-type virus, and possible waning immunity. At this point, a small number of mumps cases have been identified on college/university campuses in Georgia by the Georgia Department of Public Health (DPH).

Winter break, spring break, sporting events and extracurricular activities may lead to mixing of students from different colleges and universities, including those from campuses where mumps outbreaks are occurring. As students return to campus from winter break and prepare for spring break, DPH urges college and university student health centers to remain vigilant and consider mumps in students with acute parotitis or other salivary gland swelling, orchitis or ophoritis, unexplained by another more likely diagnosis, regardless of vaccination history.

Mumps Epidemiology and Clinical Symptoms

Mumps is a contagious viral infection characterized by the acute onset of unilateral or bilateral, tender swelling of parotid or other salivary glands, often proceeded by a nonspecific prodrome which may include muscle aches, loss of appetite, malaise, headache, and fever. An estimated 30% of mumps infections have no apparent salivary gland swelling and may be asymptomatic or manifest primarily as a respiratory infection. In recent U.S. outbreaks, complications of mumps have included orchitis in up to 10% of adolescent and adult males, and oophoritis in ≤1% of adolescent and adult females. More rarely pancreatitis, meningitis, encephalitis, and deafness has occurred.

Mumps is spread by contact with infectious respiratory tract secretions and saliva. The incubation period is typically 16 to 18 days but can range from 12 to 25 days. In recent mumps outbreaks, the majority of cases had received two doses of MMR vaccine. Therefore, a history of appropriate vaccination does not rule out mumps in persons with compatible symptoms.

Reporting

Mumps is a notifiable disease and suspect mumps cases should be reported to the Georgia Department of Public Health (O.C.G.A. §31-12-2) as soon as possible. Report suspect cases to public health by calling your District Health Office or the DPH Acute Disease Epidemiology Section at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH after-hours on evenings and weekends. Do not await laboratory results before reporting.

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front of the ear to the angle of the jaw line, should be massaged for 30 seconds. Detailed specimen collection guidance is available at the DPH mumps website.

Acute infection may also be laboratory confirmed by the presence of mumps IgM antibody or a significant rise in mumps IgG antibody titer between acute- and convalescent-phase serum specimens. However, interpretation of mumps IgM results should be made with caution, as response may be attenuated or absent in vaccinated persons, and disease processes may cause false positive IgM results due to cross-reactivity.

The Georgia Department of Public Health strongly recommends the **collection of serum for mumps IgM/IgG AND collection of two buccal swabs and a urine specimen to confirm a mumps case**. To coordinate specimen collection and laboratory submission, call your District Public Health Office or the DPH Acute Disease Epidemiology Section at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH after-hours on evenings and weekends. **Please do not send specimens directly to the Georgia Public Health Laboratory (GPHL) or the Centers for Disease Control and Prevention (CDC).**

Vaccination

Mumps-containing vaccine (MMR) remains the most effective prevention against disease. One dose is 78% effective, and two doses are 88% effective[†]. Although mumps immunity may wane over time and vaccinated individuals can still develop mumps, infections tend to be milder with a much lower incidence of complications.

It is important to ensure students and staff are up-to-date on their MMR vaccine; the first dose of MMR is recommended for children at 12 to 15 months of age with a second dose at 4 to 6 years of age.

Although a third dose of MMR has been selectively utilized as a control measure in a few recent large outbreaks, at this time the CDC recommends isolation measures as a first line in controlling mumps transmission in most outbreak settings among vaccinated individuals. **DPH does not recommend a 3rd dose of MMR at this time.**

Recommendations

The Georgia Department of Public Health (DPH) recommends that Georgia college and university student health centers take the following actions in anticipation of a possible mumps outbreak campus:

- Review the signs and symptoms of mumps and DPH testing guidance with student health staff. <u>Students suspected of</u>
 having mumps should be excluded from classes and activities and be instructed to avoid close contact with others for five days following the onset of salivary gland swelling.
- Report suspect cases to public health at the time of laboratory testing by calling your District Public Health Office or the DPH Acute Disease Epidemiology Program at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH after-hours on evenings and weekends.
- Increase awareness among students, faculty, and staff by providing educational materials about the signs and symptoms of mumps and where they can obtain medical evaluation
- A history of two doses of measles, mumps, and rubella (MMR) vaccine with at least 28 days between doses is considered the best protection against acquiring mumps infection and/or its complications. Students not previously vaccinated, or unsure whether they have received both doses should be brought up to date.
- Anticipate the possibility of a mumps outbreak on campus, by considering the availability of a facility that could be used to isolate cases while infectious, and the capacity for testing and vaccinating in such an event.

Mumps can spread very quickly on college/university campuses, even when most students have had two doses of MMR vaccine. We appreciate your efforts to protect the health of students and will update you if the situation in Georgia changes.

If you have any questions or concerns please contact Ebony S. Thomas, MPH (<u>Ebony.Thomas@dph.ga.gov</u>) or Jessica Tuttle, MD (<u>Jessica.Tuttle@dph.ga.gov</u>) at 404-657-2588.

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Ensure that patients are up-to-date on their MMR vaccine. Vaccination is recommended for children at 12 to 15 months of age with a second dose at 4 to 6 years of age. Documentation of two MMR vaccinations or proof of immunity to mumps is required to attend school in Georgia.

Although a third dose of MMR has been selectively utilized as a control measure in a few recent large outbreaks, at this time the CDC recommends isolation measures as a first line in controlling mumps transmission in most outbreak settings among vaccinated individuals. DPH has not identified any mumps outbreaks on college/university campuses in Georgia and does not recommend a 3rd dose of MMR at this time.

Actions Requested of Healthcare Providers:

- Consider mumps in persons with acute parotitis or other salivary gland swelling, or orchitis or oophoritis, unexplained by another more likely diagnosis, regardless of vaccination history.
- Use droplet and standard precautions when caring for suspect or confirmed cases and verify that healthcare workers likely to encounter these patients have documented immunity.
- Obtain appropriate clinical specimens. For acutely ill patients who have been previously vaccinated or who are part of an outbreak, a buccal swab for PCR testing is preferred.
- <u>Isolate suspect and confirmed mumps cases and instruct them not return to school, work, or other public places until five days after the onset of parotitis</u>. Exposed healthcare providers, without evidence of immunity, should be excluded from work.
- Report suspect cases to public health before obtaining confirmatory lab results by calling your District Health Office or the DPH Acute Disease Epidemiology Program at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH after-hours on evenings and weekends.
- Ensure patients are up-to-date on their vaccinations according to CDC's recommended schedules for children and adults.

GA DPH Contact Information

Ebony Thomas, MPH or Jessica Tuttle, MD Vaccine-Preventable Disease Unit

Phone: 404-657-2588

Email: Ebony.Thomas@dph.ga.gov or Jessica.Tuttle@dph.ga.gov

- *2016 data are preliminary and subject to change.
- † Includes suspect, probable and confirmed
- ‡ Centers for Disease Control and Prevention (2016, July 14). Mumps Vaccination. Retrieved from https://www.cdc.gov/mumps/vaccination.html