

Immunize Georgia



A publication of the Georgia Department of Public Health

SPRING 2017



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WHAT'S INSIDE

! Human Papillomavirus Vaccine (HPV) Update

In October 2016, the Advisory Committee on Immunization Practices (ACIP) recommended that adolescents 9 through 14 years of age receive two doses of human papillomavirus vaccine (HPV) at least six months apart rather than the previously recommended three doses to protect against cancers caused by HPV infections.¹ Teens and young adults who start the series later, at ages 15 through 26 years, or who are immunocompromised ages 9 through 26 years, will continue to need three doses of HPV vaccine to protect against cancer-causing HPV infection.¹ Detailed information about ACIP's HPV recommendations can be found at <https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html>.

According to recent HPV vaccination coverage estimates from the 2015 National Immunization Survey-Teen (NIS-Teen), HPV vaccination is becoming more routine.² Sixty percent (60%) of teen girls and 50% of teen boys

in the United States have started the HPV vaccination series by receiving at least one dose of HPV vaccine.² Despite increasing HPV rates, fewer teens are getting the HPV vaccine when compared to the Tetanus, diphtheria, acellular pertussis (Tdap) and meningococcal vaccines. Eighty-six percent (86%) of teens have received a Tdap vaccine and 81% have received a meningococcal vaccine.² Tdap and meningococcal vaccine rates may be higher than HPV rates due to school entry requirements. However, this discrepancy highlights a missed opportunity to administer HPV vaccine when Tdap and meningococcal vaccines are given.

The Centers for Disease Control and Prevention (CDC) encourages providers to recommend HPV vaccination for all adolescent and teen patients on the same day and in the same way they recommend other preteen vaccines.

Use every opportunity to effectively recommend all of the adolescent vaccines to parents of your preteen and teen patients. **Parents trust your opinion more than anyone else's when it comes to immunizations.** Use the resources to help you make effective recommendation and answer questions to help parents overcome HPV vaccine hesitancy.

Take Action By:

1. Avoiding missed opportunities to administer HPV vaccine—effectively recommend the HPV vaccine the same way and on the same day that you recommend other adolescent vaccines.

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Immunize Georgia



2. Use CDC's tools to help you make effective recommendations and answer parents' questions about HPV vaccination. Continuing education courses can provide effective ways to communicate with parents about HPV vaccine.
3. Knowing your state HPV vaccine coverage rates to see how you're doing with HPV vaccination in comparison and sharing that information with your office staff and colleagues.

Contact your Immunization Regional Consultant (IRC) to obtain your facility's coverage rates.

The Georgia Department of Public Health joined other key stakeholders to create Georgia's HPV workgroup as a part of the state's cancer consortium. In effort to promote and encourage higher vaccination rates and lessen the number of missed opportunities within provider offices and clinics, the workgroup has developed an action plan.

The implementation of the HPV Champion initiative. As an HPV Champion Provider, medical professionals will be recognized as an expert resource and for their promotion of best practices at any and all opportunities with the public or among their peers. These are physicians that suggest activities and educational

opportunities for their community in attempt to increase HPV vaccination rates. Ten champions have been chosen by IRCs throughout the state. Each have coverage rates that exceed the national average in HPV administration. These champions will be featured at our 2017 Immunize Georgia conference as well as asked to participate in peer-to-peer seminars to share their best practices with their colleagues.

The screening of the documentary film "Someone you Love: An HPV Epidemic." Georgia purchased a license to pilot three screenings for Someone You Love. Conducting these viewings of the movie will hopefully encourage parents and patients to actively protect themselves by getting vaccinated and providers to give stronger recommendations. The first screening was held in January 2017 with 36 attendees who were offered continuing education hours and heard from a panel which included a gynecologist, radiation oncologist, pediatrician, cervical cancer survivor and a CDC immunization expert. The next viewing will be May 2017 •

Sources:

1. Centers for Disease Control and Prevention (October 19, 2016). CDC recommends only two HPV shots for younger adolescents. Retrieved from <https://www.cdc.gov/media/releases/2016/p1020-hpv-shots.html>.
2. Centers for Disease Control and Prevention (March 10, 2017). HPV Vaccination Coverage Data. Retrieved from <https://www.cdc.gov/hpv/hcp/vacc-coverage.html>.

HPV: Nine Years a Cervical Cancer Survivor



Cancerversary: June 2007
Age at diagnosis: 30
Diagnosis: Cervical cancer
Stage of cancer: (Stage IAI)
Hometown: Augusta, GA

I am a Nine Year Cervical Cancer Survivor!
Here is my story. My name is Quita.

How my story begins: I was diagnosed in June 2007 at 30 years of age, with Stage IAI Cervical Cancer, even though I have always kept my annual pap smear appointments.

Life before my diagnosis: Prior to my diagnosis I was in nursing school to be an RN.

How I felt after diagnosis: The diagnosis was devastating for me as I thought I was doing what I was supposed to by having my paps every year on time. I remember the doctor saying possible cancer and we need to send you for a biopsy, but it was like an out-of-body experience. Her mouth was moving, but the room seemed to be spinning. I didn't have any children and I felt hurt by the thought I possibly wouldn't be able to have a child.

Telling my family and friends: The first family member I called to tell, I couldn't get the news out for

Early Detection

Saves Lives!

crying. I told them at different times and I just said I have cervical cancer. I must have surgery to remove the cancer and I hope that this treatment will allow me to have a child or children.

My treatment: I had a trachelectomy, which would give me a chance to conceive. However, there were no guarantees that I would be able to conceive or carry a baby to full term and would more than likely need to seek fertility help to conceive.

How I felt after treatment: I felt confident after treatment. I wasn't in a rush to start a family.

What was most difficult for me: The most difficult thing for me was finding support and women who have experienced what I was going through and about to go through. There were no local support groups for cervical cancer and I didn't know anyone in my family or outside our family who could share their experience with me. I found support through internet searches, which led me to the NCCC-National Cervical Cancer Coalition. I attended the first conference and made friends with some great women who were survivors.

What I did to help myself: I had one day of crying and feeling sorry and said that's it! My first option of treatment was to have a hysterectomy, which would have left me unable to have kids, so I asked my doctor if I had any other options. A trachelectomy was explained to me and I said let's do this and get this cancer out! I encourage my co-workers, family, and friends to speak with their doctor about a HPV vaccination. I wish I would have had the opportunity to be vaccinated and not sharing my experience.

My life after cancer: The great news is that in August 2009, I had a son without fertility help, and I've continued

my annual appointments. I went back to work with no restraints.

Where I am today: Today, I am a nine-year survivor with no recurrences. I share my testimony with cervical cancer every chance I get. I have a healthy, handsome 7-year-old son. I'm into fitness and eating healthier. I enjoy meeting new people, photography and spending time with my family.

What I want other women to know: I have come to understand that not all women are diagnosed as early, their options of treatment are different, their outcomes are different, and they may not have great support systems. These reasons, along with my own battle, gave me the courage and encouragement to start Walk 2 Inspire, a nonprofit to raise awareness of HPV/Cervical Cancer and a support.

My message is Early Detection Saves Lives! I'm a living testimony. I encourage women to please have your annual pap exams and be your own advocate for your health. Also, please educate young women about the importance of their health, as well as the importance of getting the HPV vaccine, and ask your physician questions. No question is stupid except the question not asked.

How I will try to help others: I host free local seminars in January-Cervical Cancer Awareness Month with information on HPV/Cervical Cancer. I speak with people locally and share my story and I support any newly diagnosed women or women having biopsies to rule out cervical cancer. •

HPV
vaccination
is cancer
prevention.

64%
drop

"It has been a full decade since the Advisory Committee for Immunization Practices recommended human papillomavirus (HPV) vaccine and almost half of all adolescents still have not received their first dose," says Dr. Harry Keyserling, an Infectious Disease Expert and Committee Chair at the Georgia Chapter, American Academy of Pediatrics. He also states, this

low vaccination rate is dramatic when compared to other routine childhood immunizations such as polio and measles, mumps and rubella, where compliance is above 90 percent.

For females in Georgia, immunization rates have declined when looking at data published from the Center for Disease Control (CDC). Dr. Keyserling states that immunization rates for Georgia's females are well below the national average, and slightly above the national average in males.

When asked about the effectiveness of the vaccine, Keyserling, referenced two studies that demonstrated the benefits from the HPV vaccine. In just five to six years after the vaccine became available studies found a 64 percent drop in cancer causing HPV infections in girls ages 14 to 19 and a 61 percent drop in treatment of genital warts.

! Flu Health Advisory

The 2016-2017 influenza season is underway. Influenza seasonality is monitored during the MMWR weeks 40 through 20 (Oct. 2, 2016 – May 20, 2017). While influenza activity remains elevated, it is likely that influenza activity peaked in Georgia during the week ending Feb. 18, 2017. As of Mar. 14, 2017, there have been 24 influenza outbreaks reported to the Georgia Department of Public Health (DPH). Most of the outbreaks occurred in long-term care facilities; others were reported in schools, daycares and healthcare facilities. There have been four confirmed influenza-associated deaths, and this number may increase as there is often a delay in reporting.

So far this season the most common strain of influenza has been Influenza A (H3N2). H3N2 predominate seasons are often associated with more severe illness in the very young (less than 5-years-old) and those over 65 years of age. Influenza B viruses have continued to increase in the last few weeks; this is not unusual, and often a second wave of influenza B activity happens later in the season.

While influenza activity appears to be decreasing, it is still circulating, and those who have not been vaccinated

against the flu should still get their vaccine as soon as possible. The Centers for Disease Control and Prevention (CDC) released interim estimates of vaccine efficacy for the current season. Overall, the vaccine is 48 percent effective at preventing patients from receiving medical attention for influenza A and B infections. While influenza vaccines are not perfect, they are the best way to prevent infection.

In Mar. 2017, the United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) confirmed highly pathogenic avian influenza (HPAI) A (H7N9) virus of North American wild bird lineage in a commercial chicken breeder flock in Lincoln County, Tennessee. This virus is different from the virus circulating in China that caused human infections with serious illness. No human infections are associated with the Tennessee outbreak, and there is low risk to public health. DPH is working with the Georgia Department of Agriculture to monitor the situation. While there have been no poultry outbreaks in Georgia, this is a reminder to avoid wild birds and contact with domestic birds that appear ill or have died. •

“Take 3” Actions to Fight the Flu*



* <https://www.cdc.gov/flu/protect/preventing.htm>

Mumps – What You Should Know

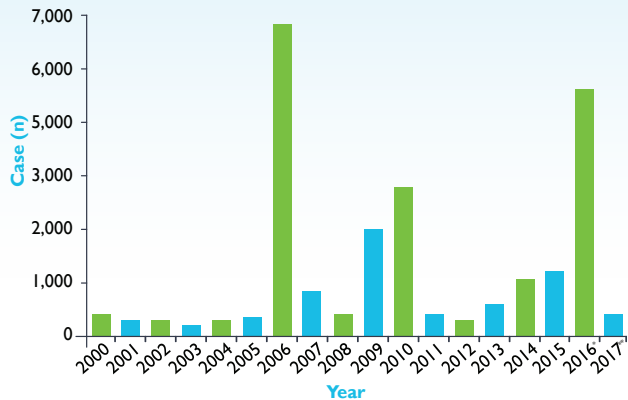


Figure 1. U.S. Mumps Cases by Year – 2000-2017†

Clinical Signs & Symptoms

Mumps is a contagious viral infection characterized by the acute onset of unilateral or bilateral, tender swelling of the parotid or other salivary glands, often preceded by a nonspecific prodrome, which may include muscle aches, loss of appetite, malaise, headache and fever. An estimated 20 – 40 percent of mumps infections may be asymptomatic or manifest primarily as a respiratory infection.

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. A history of appropriate vaccination does not rule out mumps in persons with compatible symptoms.

The majority of cases in recent mumps outbreaks have been fully vaccinated against mumps with two doses of MMR vaccine.

Background

In 2016*, 5,151 mumps cases were reported to the Centers for Disease Control and Prevention (CDC) – the highest number reported nationally since 2006 when 6,584 cases were reported (Figure 1). Many of these cases were associated with outbreaks in college/university settings. These outbreaks mostly affected young, vaccinated adults, ranged in size from a few to several hundred cases, and were 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.

From Jan. 1 to Feb. 25, 2017, 37 states and the District of Columbia have reported 1,077† cases to the CDC.

As of Mar. 7, 2017†, a total of 23 cases of mumps have been reported to the Georgia Department of Public



Health (DPH) – six confirmed, five probable and 12 suspect (Figure 2). This is an increase, when compared to the three reported during the same time period in 2016. The majority of mumps cases were in 15-24 year-olds (39.1 percent) and 1 – 4 year-olds (21.7 percent). Of the 15 with vaccination status reported, two (13.3 percent) were unvaccinated and 13 (86.7 percent) were vaccinated. Of the 13 cases who were vaccinated, two (15.4 percent) had one dose, and 11 (84.6 percent) had two doses. 21 (91.3 percent) of the cases were white, non-Hispanic; one (4.3 percent) was African American, non-Hispanic; and one (4.3 percent) reported race as other.

Of the 23 cases reported, six (26.1 percent) were in college students. All of these students were laboratory-confirmed by polymerase chain reaction (PCR) or viral isolation. Five of the six cases (83.3 percent) are believed to have acquired mumps while traveling internationally. Three of the students reported travel to Panama and two of the students reported travel to Ecuador.

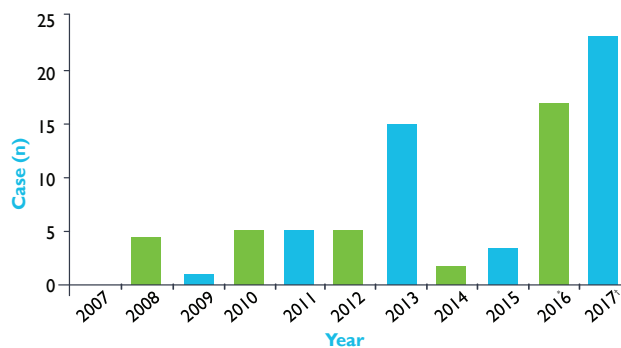


Figure 2. Georgia Mumps Cases by Year – 2007-2017†

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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 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. Do not await laboratory results before reporting.

Vaccination

Mumps-containing vaccine (MMR) remains the most effective prevention against disease. One dose is 78 percent effective, and two doses are 88 percent 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. Ensure that patients are up-to-date on their MMR vaccine. Vaccination with MMR 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.

Recommendations for 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 in the healthcare setting when caring for suspect or confirmed cases and verify that staff 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. Specimen collection guidance can be found at http://dph.georgia.gov/sites/dph.georgia.gov/files/ADES_Mumps_Specimen_Collection_Guidelines_FINAL.pdf.
- **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.** Exposed healthcare providers, without evidence of immunity, should be excluded from work (Please refer to the Healthcare personnel exclusion found at <https://www.cdc.gov/vaccines/pubs/surv-manual/chpt09-mumps.html> for more information).
- Ensure patients are up-to-date on their vaccinations according to CDC's recommended schedules for children and adults. •

* 2016 data are preliminary

† 2017 data are preliminary

‡ Centers for Disease Control and Prevention (2016, July 14). Mumps Vaccination. Retrieved from <https://www.cdc.gov/mumps/vaccination.html>

Mumps Vaccination Recommendations

CDC recommends that children get two doses of MMR vaccine:

- The first dose at 12 -15 months of age, and
- The second dose at 4-6 years of age
- For children age 7-18 years, not previously vaccinated, one dose of MMR vaccine, followed by a second dose of either MMR vaccine at least 4 weeks after the first dose.
- For adults born in 1957 or later and not previously vaccinated, one dose of MMR vaccine.
- A second dose of MMR vaccine is recommended for adults born in 1957 or later, who are students in a post-secondary educational institution, work in a health care setting, or plan to travel internationally. The second dose should be administered a minimum of 28 days after the first dose.



Spotlight on Hall County

In honor of National Preteen Vaccine Awareness Week 2017, one school nurse at Chestatee Middle School took it upon herself to make sure her 6th grade students understood the 7th grade vaccination requirement law. Despite the ongoing challenges of her daily work and the flu season that would never end, Alison Brewer, RN recognized the value of immunization education and made it a priority.

Alison is a part of Mamie Coker’s team of amazing School Nurses in Hall County who are educating students and increasing awareness about the importance of vaccines in hopes that they will go home and share the information with their parents.

Congratulations to Alison Brewer, Mamie Coker and Hall County School Nurses! •



GRITS Recall System

The Reminder Recall Function in GRITS informs parents and guardians that their child may need vaccinations. It can generate letters, cards, address labels or client listings. Notices are generated for every responsible person associated with a client only if the client’s status is “Active” and the “Allow Reminder and Recall Contact” indicator is “Yes.” Also, on the responsible person’s tab, the “Notice” indicator should be checked and the responsible person should have sufficient name and address information listed in this section.

Once the conditions are met for generating reminder/recall notices, click “Request Reminder” on the right panel of the screen under the “Reports” menu option. Click the appropriate radio button in the top section of the reminder recall request screen to choose the tracking schedule for clients the report will cover.

Various optional search criteria can be used to tailor and limit the search to specific needs. In the search criteria section click the appropriate radio button to indicate your choice of various options to limit the search. Choose from ALL or selected vaccine groups; specific schools or primary care providers (PCP); city and/or ZIP codes to narrow geographical areas; counties to expand the search to all responsible persons who reside in the selected county; date and/or birth date range; and gender.

Users can also choose to include or excluded certain clients from their query by entering a number in “Weeks since last Notice” and choose to include only clients who have not received a reminder notice within the specified number of weeks prior to the current date or “Excluding from Today’s Date” to exclude any clients overdue more than X months from today’s date.

Notes: Whenever a date range is left blank, the report will generate with current date the report is run. Dates can range from the past to the future giving you the ability to run a recall, a reminder or a combination of the two. If the birth date range is left blank, the report will include the oldest clients in the system. It is also important to note that since clients are shared between organizations, another organization may have recently generated a notice for the client. If you are looking for only those records marked unknown, choose the Unspecified/Unknown radio button; this option will not reveal any record marked Male or Female. If gender is not indicated for a record, the system will default to unknown. A record may also be categorized as Unknown, if the gender cannot be determined at the time the record is entered.

The Sorting Criteria section allows you to specify how the data will be sorted. You can choose either ascending

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(A to Z) or descending (Z to A) order from the pick list for up to four ordering sequences. If a sort order is not specified, GRITS will sort the report results first by the client's last name in ascending order (A to Z), then by the first name in ascending order. Once sorting is complete. Press the Generate button. Depending upon the number of clients associated with your provider organization, it may take five minutes or more to generate the data for the various reports. Once the generate button has been pressed, the next screen displayed will be the Reminder Request Status screen.

While the data are being generated, the check request status page indicates the percentage complete, as well as the date and time the request was started and completed. If the request status indicates "Queue" this means the request is in line to be processed through the system. You can periodically press refresh to update the status of the report. Once you reach the Reminder Request Status screen, it is not necessary to stay at this screen while your report is being created. You may work in other areas of the system or close out GRITS altogether while waiting for the reminder/recall request to complete. If you decide not to stay on the request status page, you may check the status of your request by clicking on "Check Reminder Status" under the Reports menu option in left panel. When the report is complete, click on the link to be routed to the Reminder Request Process Summary screen. The Summary screen lists the number of clients involved in the search and eligible for the reminder based on the criteria used to define the search. From the Summary screen, you can review and select various reminder output options. You can choose Letters, Cards, Labels or Client Query Lists.

The letter output option allows room at the top for your organization's letterhead to generate a standard form letter for the responsible person for each client returned in your query. The body of the letter includes the client's immunization history, recommended immunizations, due dates, and up to two lines of free text and/or a telephone number.

The card output option allows you to generate a fold-over (8x5 inch) postcard, printed one card per page. The body of the card includes the client's recommended immunizations and due dates, up to two lines of free text, and a telephone number.

The labels output option produces 30 labels per page on Avery Mailing Labels #5160.

The Client Query Listing is produced for the provider organization administrator's records. This report lists

every client that was returned in the report query process, along with the phone number and address of every responsible person associated with each client. Please note: Insufficient addresses or telephone numbers on this report represent missing information on a responsible person tab.

To generate an output option, complete optional data fields, such as report names, etc. if desired and click on the output option link to generate your report choice. Once your output option is ready, a blue link will appear in the Reminder Request Status screen. Click on the report name to view or print your output option in Adobe Acrobat Reader®. To print additional notices, press the back button on your browser. At the Reminder Request Status screen, click on the underlined reminder request link to return to the Reminder Request Process Summary screen.

At the bottom of the Reminder Request Process Summary screen, you have the option of resetting the last notice date, which will affect future reminder/recall notices generated using this information.

Your options on the "Last Notice Date" table include:

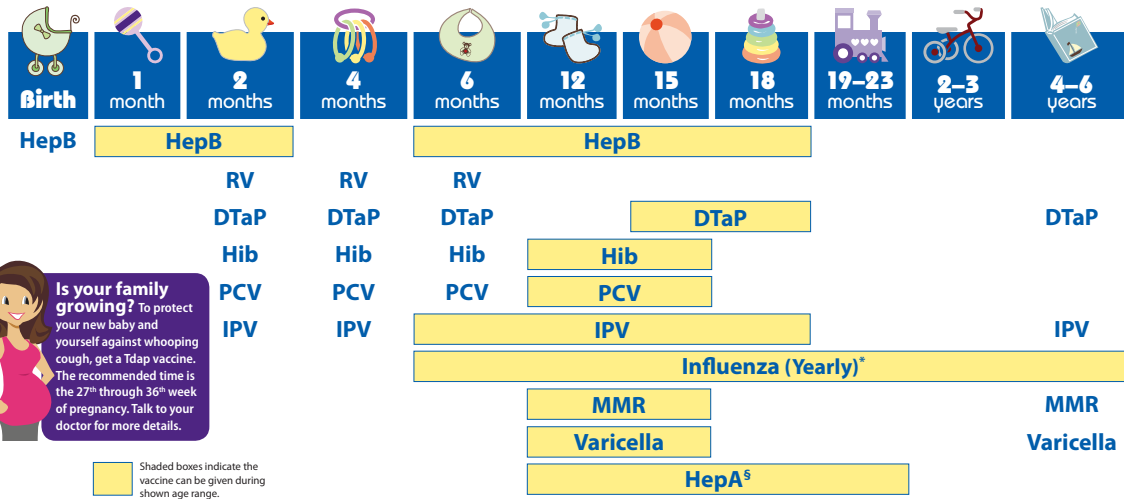
- Opt 1: Today's date which is the default option and is indicated by a check mark.
- Opt 2: The previous last notice date by pressing "Revert Eligible" Use this option if you wish to revert the last notice date to the previous last notice date for all clients eligible for the reminder.
- Opt 3: The previous last notice date for all clients immunized by your organization by selecting "Revert All" Use this option if you wish to revert the last notice date to the previous last notice date for ALL clients immunized by your organization, to include clients not eligible for this reminder.

Please Note: Choosing options 2 or 3 will cause the date of the notice created today to be ignored.

If you choose to not to use the Last Notice Date Options, simply click cancel to return to the previous screen.

For additional clarification or assistance with generating reminder and or recall notices, a more extensive tutorial is available by contacting dph-gaimmreg@dph.ga.gov or by accessing the user guide manual available in the blue panel menu section of GRITS. •

2017 Recommended Immunizations for Children from Birth Through 6 Years Old



Is your family growing? To protect your new baby and yourself against whooping cough, get a Tdap vaccine. The recommended time is the 27th through 36th week of pregnancy. Talk to your doctor for more details.

NOTE:
If your child misses a shot, you don't need to start over, just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

FOOTNOTES:

* Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.

⁵ Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 to 18 months later. HepA vaccination may be given to any child 12 months and older to protect against HepA. Children and adolescents who did not receive the HepA vaccine and are at high-risk, should be vaccinated against HepA.

If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he may need.

SEE BACK PAGE FOR MORE INFORMATION ON VACCINE-PREVENTABLE DISEASES AND THE VACCINES THAT PREVENT THEM.



For more information, call toll free **1-800-CDC-INFO** (1-800-232-4636) or visit www.cdc.gov/vaccines/parents



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



American Academy of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDRENSM

Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hib	Hib vaccine protects against <i>Haemophilus influenzae</i> type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic, and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pinkeye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Mumps	MMR** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness
Pertussis	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal	PCV vaccine protects against pneumococcus.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Rotavirus	RV vaccine protects against rotavirus.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Children infected with rubella virus sometimes have a rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

* DTaP combines protection against diphtheria, tetanus, and pertussis.

** MMR combines protection against measles, mumps, and rubella.

Last updated December 2016 • CS272886-E



Mark Your Calendars: 2017 Immunize Georgia Conference

Make every connection count – through providers, media and your community.

The Georgia Department of Public Health is proud to announce the 24th Annual Immunize Georgia Conference will be held at the Columbus Georgia Convention and Trade Center Friday, Sept. 15, 2017.

Our annual Immunize Georgia Conference provides the latest requirements, updates and news in immunization services. We connect public and private health practitioners for a common cause: improving Georgia's immunization rates and protecting every adult and child from vaccine-preventable diseases.

The Immunize Georgia conference is a great way to obtain credit hours. We provide CME, CNE (contact hours) and CE credits for physicians, RNs, pharmacists and pharmacy techs and issue certificates of completion to all other attendees including medical assistants, clinical staff, medical/nursing/pharmacy students and others involved in immunization services.

This year we are excited to welcome renowned speakers including:

- **Marshall Lyon, MD, MMSc**, Associate Professor of Medicine, Emory University School of Medicine

- **Glen Nowak, M.D.**, Professor of Advertising and Public Relations, College of Journalism and Mass Communication University of Georgia
- **Donna Weaver, R.N., M.N.**, National Center for Immunization and Respiratory Diseases (NCIRD), Centers for Disease Control and Prevention (CDC)
- **Henry Wu M.D., DTM&H**, Co-director TravelWell, Assistant Professor of Medicine, Emory University School of Medicine

Some hot topics we plan to discuss this year include: vaccine hesitancy and confidence, travel vaccines, GRITS and VFC, vaccines for transplant patients, adolescent vaccines and social media in healthcare.

If you have any questions about the conference, please visit us online at www.immunizegeorgia.com, email us at ImmunizeGeorgia@golin.com or call us at 404-367-2766. •