Georgia Adolescent Immunization Study



PREPARED BY Fabio R. Machado, MPH Jessica Tuttle, MD Cherie Drenzek, MS, DVM **Sheila Lovett**

Principal Investigator, Author Primary Editor Editor Editor



Acknowledgements

The Georgia Department of Public Health Epidemiology and Immunization Programs would like to thank the public health representatives who participated in this study for all of their hard work, support and dedication. This study could not have been completed successfully without the cooperation of the Immunization Program Consultants and State staff throughout Georgia.

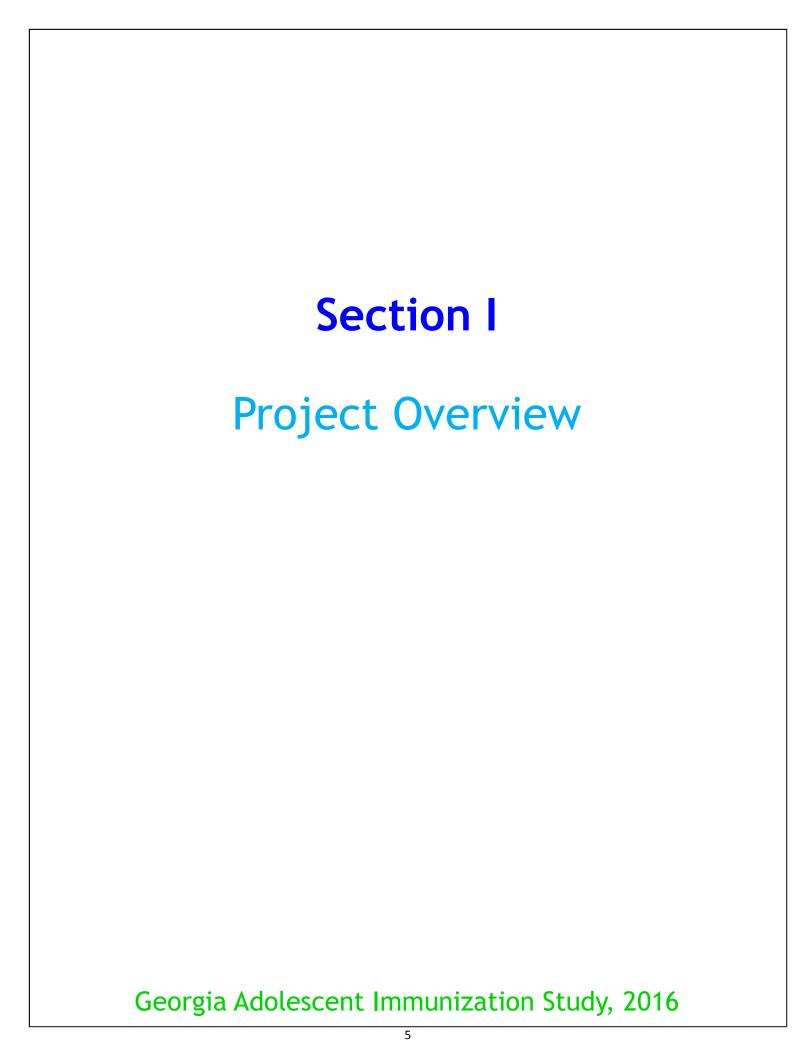
A profound thank you and sincere appreciation is also given to the public and private schools and their immunization staff and nurses that participated in this collaborative effort. Their cooperation and assistance throughout the study is greatly appreciated.

Additional gratitude goes to Karl Soetebier for the development and maintenance of our data collection system; and LaTonya Thomas and Ben Sloat for their collaborative effort in making this study possible.

"This publication was supported by the Cooperative Agreement Number 5H23IP000744-02 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention."

Table of Contents

Contents	Page(s)
Acknowledgements	1
Table of Contents	3
Section I: Project Overview	5–10
Purpose of Study	7
Methods (Sampling, Data Collection, Data Analysis)	9–10
Limitations	10
Section II: Statewide Results	11–14
Contributing Staff from Georgia Department of Public Health	13
State of Georgia Immunization Report	14
Section III: Health District Immunization Reports	15–52
District 1-1 Immunization Report (Rome District)	17–18
District 1-2 Immunization Report (Dalton District)	19–20
District 2-0 Immunization Report (Gainesville District)	21–22
District 3-1 Immunization Report (Cobb-Douglas District)	23–24
District 3-2 Immunization Report (Fulton District)	25–26
District 3-3 Immunization Report (Clayton District)	27–28
District 3-4 Immunization Report (Lawrenceville District)	29-30
District 3-5 Immunization Report (DeKalb District)	31-32
District 4-0 Immunization Report (LaGrange District)	33–34
District 5-1 Immunization Report (Dublin District)	35–36
District 5-2 Immunization Report (Macon District)	37–38
District 6-0 Immunization Report (Augusta District)	39-40
District 7-0 Immunization Report (Columbus District)	41-42
District 8-1 Immunization Report (Valdosta District)	43-44
District 8-2 Immunization Report (Albany District)	45-46
District 9-1 Immunization Report (Savannah District)	47–48
District 9-2 Immunization Report (Waycross District)	49-50
District 10 Immunization Report (Athens District)	51-52
Appendix	i-vi
Appendix A: Margins of Error for UTD Immunization Rates	iii
Appendix B: Frequency of Exemptions	iv
Appendix C: District Immunization Measures by Vaccine-Antigen	V
Additional Resources	Vi



Purpose of Study

The Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP) recommend that adolescents routinely receive Tdap, MCV4, and the 3 dose HPV series at 11 to 12 years of age¹. Beginning in the 2014-2015 school year, Tdap and MCV4 were added to the list of required vaccines for Georgia students entering seventh grade who were born on or after January 1, 2002. This report summarizes the annual assessment of immunization coverage for Tdap and MCV4 as well as one and three dose coverage of HPV among seventh grade students in Georgia's 18 Public Health Districts. In addition to determining adolescent coverage rates for vaccines required for school entry, the GA Immunization Program is interested in determining whether providers are making strong, clear HPV recommendations to parents of adolescents when teens are seen in clinics for their seventh grade Tdap and MCV4 vaccinations.

¹Department of Health and Human Services - Centers for Disease Control and Prevention. (January 28, 2011). MMWR weekly: General Recommendations of Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2011; 60(RR02);1-60. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm

Methods

Study Design

The annual Georgia Adolescent Immunization Study (GAIS) employs a cross-sectional research design to ascertain the vaccine coverage rate for 7th grade children in the State of Georgia. Immunization history data for cohorts of children in the 7th grade from 18 Health Districts were analyzed to calculate these rates. Identifying information and immunization history data were obtained from school 3231 files and the Georgia Registry of Immunization Transactions and Services (GRITS). Immunization rates for Tdap, Polio, MMR, MCV4 (meningococcal), Hepatitis B, Varicella and HPV vaccines were calculated.

Data collection for the 2016 GAIS study began January 15, 2016 and lasted for three months. A two-stage cluster-sampling scheme was developed to randomly select the study sample. Stage one of the cluster sampling scheme involved randomly selecting up to 30 middle schools from each of the 18 Health Districts. The number of schools sampled from each district was determined using the following factors:

- A) target population size per district
- B) estimated percent response rate
- C) estimate design effect
- D) confidence coefficient
- E) confidence interval width

If a District had fewer than 30 schools, then all schools in that District were sampled.

Stage two of the sampling scheme involved randomly selecting an established number of students from each school. This number varied by District depending on the number of schools sampled and population. Basic coverage rates were then calculated for each of the specific vaccines of interest.

Target and Sample Populations

The target population of the 2016 GAIS included all 7th grade children in the State of Georgia during the 2015-2016 school year. A sample of 6,191 seventh grade students, attending both private and public Georgia schools, were selected for the study. The sample design allowed for independent estimates to be calculated for each of the 18 Health Districts in the state.

Data Collection

An electronic web-based data collection system named "GAIS" was created to systematically collect the required information for each child. The GAIS data collection system contains three distinct sections for completion: Child, Notes and VX List (Immunization History).

Data collection was carried out primarily by each Health District's Immunization Program Consultant (IPC). IPCs in each Health District participated in training at the start of the data collection period. A Training Manual was also provided and made available on the GAIS log-in screen.

Data Collection Protocol

Step #1: Obtain student sample

Before the data collection process began, IPCs were assigned a maximum of 30 schools in their respective Districts and assigned a required number of students per school to be sampled. Once at a school, the IPC obtained an alphabetized roster of all current 7th graders attending that school. Using the total number of seventh graders, a random number generator was applied to randomly select the 13 students chosen as the 2016 GAIS sample.

Step #2: Collect immunization forms at public and private schools.

Once the IPC selected the school sample, each specific child's 3231 form was located to obtain their immunization history. A comparison of the GRITS record and the 3231 form was conducted for each child to make sure all vaccines received matched between sources. If any dates were missing from either source, steps were taken to update the 3231 form and/or the GRITS record to match. If a 3231 was found to be expired, a new one was printed out from GRITS for school record.

Step #3: Input children to data collection website

A record was then created by the IPC for each child in the GAIS website. Information collected included first and last name, date of birth, county, school, exemption and waiver status and lab confirmation of immunity. A blank vaccine list was also available in the GAIS record for the IPC to either: 1) add each of the vaccine dates of interest in the table; or, 2) perform a direct upload from GRITS into the GAIS record.

Step #4: Data returned to State Epidemiology office

Using the GAIS system, data collectors completed adding records for all required children in their District. As the records were completed using the GAIS system, each record was reviewed by the Principal Investigator. Attempts were made to resolve any unclear information before data cleaning using SAS 9.4 software.

Data Analysis

Analyses were done using SAS 9.4 software and macros developed by the Principal Investigator. Data were used to determine what percentage of 7th graders were up-to-date (UTD), which was defined as having at least 3 doses of Hepatitis B, 2 doses of MMR, 2 doses of Varicella, 1 dose of Tdap and 1 dose of MCV4 vaccines. UTD immunization rates as well as individual vaccine coverage rates were assessed at both the state and District levels.

Limitations

When interpreting study results, the following limitations of the study should be considered:

- 1. Compared to other sampling methods, cluster sampling is least representative of the population. Individuals within a cluster tend to have similar characteristics and there is a chance of over- or underrepresentation of the population, leading to skewed results. The two-stage cluster sampling scheme was used because of its low-cost and efficient method of collecting a larger sample size across a wide area.
- 2. Some IPCs had less than 30 middle schools in their District and were forced to sample all the middle schools in the District. Larger Districts were only required to sample 30 schools, due to time and resource restraints, and therefore many schools were not sampled which may have affected the results of the study.

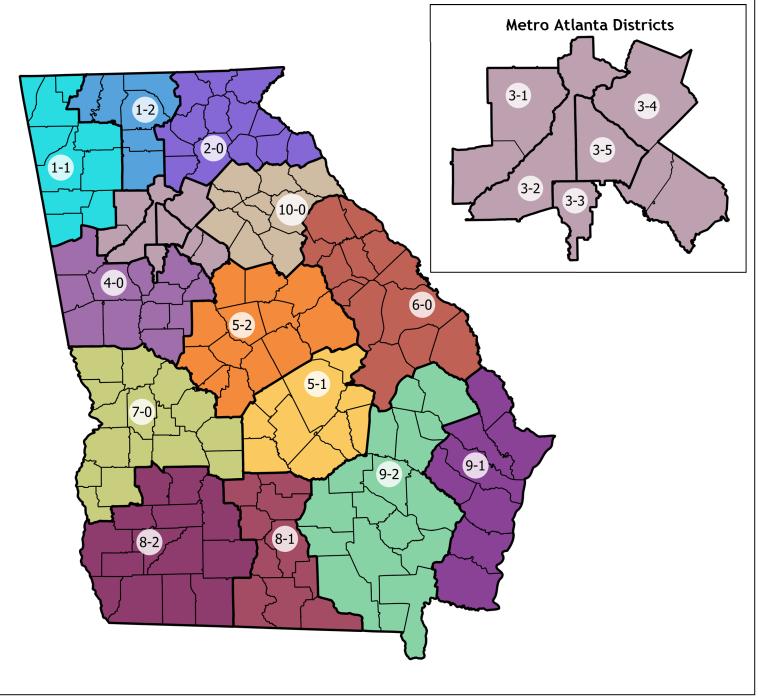
Section II Statewide Results Georgia Adolescent Immunization Study, 2016



State of Georgia



State-Level Immunization Study Staff				
Fabio R. Machado, MPH Immunization Study Epidemiologist, Principal Investigator & Author				
Jessica Tuttle, MD Medical Epidemiologist, Primary Editor				





State of Georgia

2016 Georgia Adolescent Immunization Study Report



The 2016 Georgia Adolescent Immunization Study (GAIS) sampled 6,191 adolescents in seventh grade (Table 1).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for 7th graders in Georgia was 94.7% for 2016. Overall, females were slightly more likely to be UTD than males. Immunization rates that decreased from the previous year are **bolded** (Table 1).

Coverage rates among male and female adolescents were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (47.4% vs. 41.3%). A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (16.2% vs 13.3%)(Table 1).

In the overall State sample, 5 adolescents had serologic evidence of immunity— 3 for Varicella, 1 for MMR, and 1 for Hepatitis B. Statewide, 43 students had either physician-diagnosed or a history of varicella illness (not shown).

Of the 6,191 seventh graders sampled, 49.9% were male, 48.0% were female and 2.1% had missing gender information (Table 2).

Transfer students with incomplete immunization records have a 30-day waiver period to meet immunization requirements. Only 15 (0.2%) of the students in the final sample were found to be in the school "waiver" period, meaning they were incomplete on their school-required immunizations because they were newly enrolled (Table 2).

Within the final study sample, 10 (0.2%) of the adolescents were found to have a medical exemption for one or more vaccinations and 115 (1.9%) had a religious exemption on file (Table 2).

Table 1: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender, 2016

	2015		2016	
	Overall n=6,521 (%)	Overall n=6,191 (%)	Male n=3,089 (%)	Female n=2,971 (%)
UTD rate*	90.7 ± 0.7	94.7 ± 0.6	95.0 ± 0.8	96.2 ± 0.7
3 Hepatitis B	96.9 ± 0.4	97.7 ± 0.4	98.7 ± 0.4	98.7 ± 0.4
2 MMR	96.8 ± 0.4	97.6 ± 0.4	98.4 ± 0.4	98.6 ± 0.4
2 Varicella**	94.5 ± 0.6	96.5 ± 0.5	97.2 ± 0.6	97.7 ± 0.5
1 Tdap	93.0 ± 0.6	96.1 ± 0.5	96.8 ± 0.6	97.2 ± 0.6
1 MCV4	92.5 ± 0.6	96.0 ± 0.5	96.5 ± 0.6	97.2 ± 0.6
4 Polio	95.1 ± 0.5	96.0 ± 0.5	96.5 ± 0.6	97.1 ± 0.6
1 HPV	42.5 ± 1.2	43.8 ± 1.2	41.3 ± 1.7	47.4 ± 1.8
3 HPV	14.8 ± 0.9	14.5 ± 0.9	13.3 ± 1.2	16.2 ± 1.3

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
 There were 131 students that had an unknown or missing gender status.

Table 2: Gender, School Waiver and Exemptions

among Georgia Adolescents, 2016 (n=6,191)					
	n	Percent of sample (%)			
Gender					
Male	3,089	49.9			
Female	2,971	48.0			
Missing or unknown gender	131	2.1			
School waiver					
Within waiver period	15	0.2			
Not within waiver period	6,176	99.8			
Medical Exemptions					
Medical exemption	10	0.2			
No medical exemption	6,181	99.8			
Religious Exemptions					
Religious exemption	115	1.9			
No religious exemption	6,076	98.1			

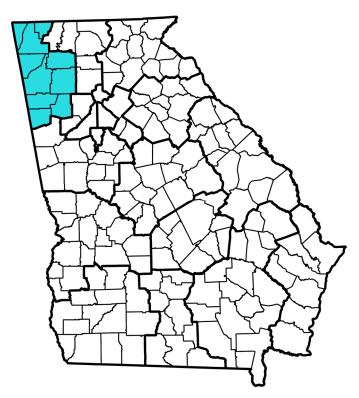
Section III Health District Adolescent **Immunization Reports** Georgia Adolescent Immunization Study, 2016



2016 Georgia Adolescent Immunization Study Report

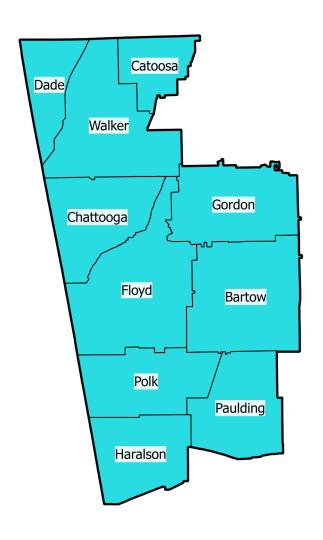
Rick Naus





County	Number in Final Sample
Bartow	40
Catoosa	39
Chattooga	27
Dade	13
Floyd	69
Gordon	24
Haralson	13
Paulding	70
Polk	13
Walker	55
District 1-1	363
District UTD Rate	96.1%
State of Georgia	6,191
State UTD Rate	94.7%

District 1-1 Data Collection Team				
	Immunization Program Consultant			





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 363 adolescents in seventh grade from District 1-1 (Table 1-1-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 1-1 was 96.1% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 1-1-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (47.8% vs. 40.1%). A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (12.4% vs 7.0%) (Table 1 -1-A).

Of the 363 seventh graders sampled from District 1-1, 47.4% were male and 51.2% were female. The gender for five students (1.4%) was unknown or missing (Table 1-1-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 1-1-B).

None of the adolescents in the District 1-1 sample were found to have a medical exemption for one or more vaccinations. Eight adolescents (2.2%) had a religious exemption on file (Table 1-1-B).

Table 1-1-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 1-1, 2016

	State	District 1-1			
	Overall n=6,191 (%)	Overall n=363 (%)	Male n=172 (%)	Female n=186 (%)	
UTD rate*	94.7 ± 0.6	96.1 ± 2.0	96.5 ± 2.7	97.3 ± 2.3	
3 Hepatitis B	97.7 ± 0.4	98.6 ± 1.2	100 ± 0.0	98.9 ± 1.5	
2 MMR	97.6 ± 0.4	98.3 ± 1.3	100 ± 0.0	98.4 ± 1.8	
2 Varicella**	96.5 ± 0.5	97.0 ± 1.8	97.7 ± 2.3	97.8 ± 2.1	
1 Tdap	96.1 ± 0.5	97.2 ± 1.7	98.8 ± 1.6	97.3 ± 2.3	
1 MCV4	96.0 ± 0.5	97.2 ± 1.7	98.3 ± 2.0	97.8 ± 2.1	
4 Polio	96.0 ± 0.5	97.0 ± 1.8	97.7 ± 2.3	97.8 ± 2.1	
1 HPV	43.8 ± 1.2	43.8 ± 5.1	40.1 ± 7.3	47.8 ± 7.2	
3 HPV	14.5 ± 0.9	9.9 ± 3.1	7.0 ± 3.8	12.4 ± 4.7	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 5 students that had an unknown or missing gender status.

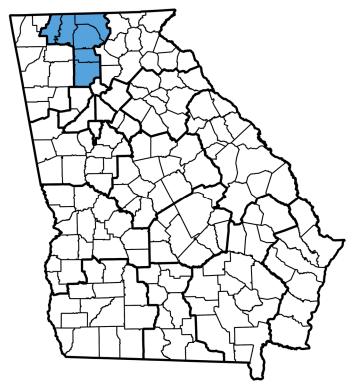
Table 1-1-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 1-1, 2016 (n=363)

	n	Percent of sample (%)		
Gender				
Male	172	47.4		
Female	186	51.2		
Missing or unknown gender	5	1.4		
School waiver				
Within waiver period	0	0		
Not within waiver period	363	100.0		
Medical Exemptions				
Medical exemption	0	0		
No medical exemption	363	100.0		
Religious Exemptions				
Religious exemption	8	2.2		
No religious exemption	355	97.8		



2016 Georgia Adolescent Immunization Study Report



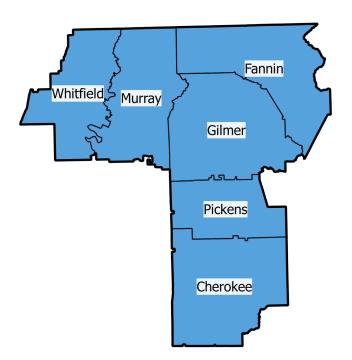


District	1-2	Data	Col	lection	Team
-----------------	-----	------	-----	---------	-------------

Jennifer Hooker

Immunization Program Consultant

County	Number in Final Sample
Cherokee	146
Fannin	25
Gilmer	12
Murray	1
Pickens	32
Whitfield	110
District 1-2	326
District UTD Rate	90.5%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 326 adolescents in seventh grade from District 1-2 (Table 1-2-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 1-2 was 90.5% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 1-2-A).

Coverage rates among male and female seventh graders were similar for all vaccines. (Table 1-2-A).

Of the 326 seventh graders sampled from District 1-2, 51.5% were male and 46.9% were female. The gender for five students (1.5%) was unknown or missing (Table 1-2-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 1-2-B).

None of the adolescents in the District 1-2 sample were found to have a medical exemption for one or more vaccinations. Seventeen adolescents (5.2%) had a religious exemption on file (Table 1-2-B).

Table 1-2-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 1-2, 2016

	State	District 1-2			
	Overall n=6,191 (%)	2016 n=326 (%)	Male n=168 (%)	Female n=153 (%)	
UTD rate*	94.7 ± 0.6	90.5 ± 3.2	89.3 ± 4.7	94.1 ± 3.7	
3 Hepatitis B	97.7 ± 0.4	96.0 ± 2.1	97.0 ± 2.6	96.7 ± 2.8	
2 MMR	97.6 ± 0.4	95.1 ± 2.3	95.8 ± 3.0	96.1 ± 3.1	
2 Varicella**	96.5 ± 0.5	93.9 ± 2.6	94.0 ± 3.6	95.4 ± 3.3	
1 Tdap	96.1 ± 0.5	92.6 ± 2.8	92.3 ± 4.0	95.4 ± 3.3	
1 MCV4	96.0 ± 0.5	91.4 ± 3.0	90.5 ± 4.4	94.8 ± 3.5	
4 Polio	96.0 ± 0.5	92.0 ± 2.9	91.7 ± 4.2	94.1 ± 3.7	
1 HPV	43.8 ± 1.2	39.9 ± 5.3	39.3 ± 7.4	41.8 ± 7.8	
3 HPV	14.5 ± 0.9	14.1 ± 3.8	13.1 ± 5.1	15.7 ± 5.8	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 5 students that had an unknown or missing gender status.

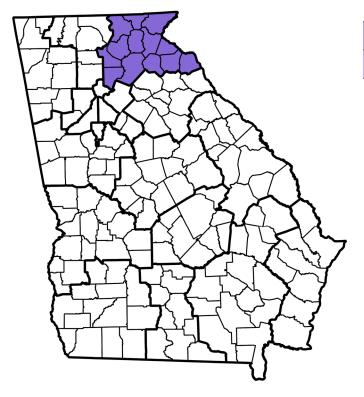
Table 1-2-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 1-2, 2016 (n=326)

	n	Percent of sample (%)	
Gender			
Male	168	51.5	
Female	153	46.9	
Missing or unknown gender	5	1.5	
School waiver			
Within waiver period	0	0	
Not within waiver period	326	100.0	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	363	100.0	
Religious Exemptions			
Religious exemption	17	5.2	
No religious exemption	309	94.8	



2016 Georgia Adolescent Immunization Study Report



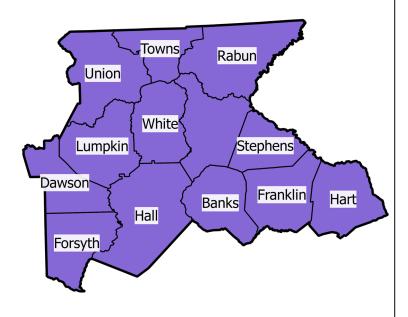


District 2-0 Data Collection Team

Jennifer Hooker

Immunization Program Consultant

County	Number in Final Sample
Banks	0
Dawson	27
Forsyth	105
Franklin	0
Habersham	39
Hall	110
Hart	8
Lumpkin	0
Rabun	13
Stephens	13
Towns	13
Union	3
White	13
District 2-0	344
District UTD Rate	94.8%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 344 adolescents in seventh grade from District 2-0 (Table 2-0-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 2-0 was 94.8% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 2-0-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (40.1% vs. 29.2%) (Table 2-0-A).

Of the 344 seventh graders sampled from District 2-0, 49.7% were male and 48.5% were female. The gender for six students (1.7%) was unknown or missing (Table 2-0-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 2-0-B).

None of the adolescents in the District 2-0 sample were found to have a medical exemption for one or more vaccinations. Fourteen adolescents (4.1%) had a religious exemption on file (Table 2-0-B).

Table 2-0-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 2-0, 2016

	State	District 2-0			
	Overall n=6,191 (%)	2016 n=344 (%)	Male n=171 (%)	Female n=167 (%)	
UTD rate*	94.7 ± 0.6	94.8 ± 2.4	95.3 ± 3.2	94.6 ± 3.4	
3 Hepatitis B	97.7 ± 0.4	97.4 ± 1.7	97.7 ± 2.3	97.6 ± 2.3	
2 MMR	97.6 ± 0.4	96.8 ± 1.9	97.1 ± 2.5	97.0 ± 2.6	
2 Varicella**	96.5 ± 0.5	95.9 ± 2.1	96.5 ± 2.8	95.8 ± 3.0	
1 Tdap	96.1 ± 0.5	94.8 ± 2.4	95.3 ± 3.2	94.6 ± 3.4	
1 MCV4	96.0 ± 0.5	95.1 ± 2.3	95.9 ± 3.0	94.6 ± 3.4	
4 Polio	96.0 ± 0.5	95.3 ± 2.2	96.5 ± 2.8	94.6 ± 3.4	
1 HPV	43.8 ± 1.2	34.9 ± 5.0	29.2 ± 6.8	40.1 ± 7.4	
3 HPV	14.5 ± 0.9	11.3 ± 3.4	9.4 ± 4.4	13.8 ± 5.2	

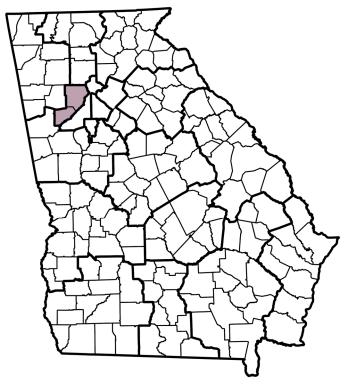
- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 6 students that had an unknown or missing gender status.

Table 2-0-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 2-0, 2016 (n=344)

	n	Percent of sample (%)	
Gender			
Male	171	49.7	
Female	167	48.5	
Missing or unknown gender	6	1.7	
School waiver			
Within waiver period	0	0	
Not within waiver period	344	100.0	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	344	100.0	
Religious Exemptions			
Religious exemption	14	4.1	
No religious exemption	330	95.9	

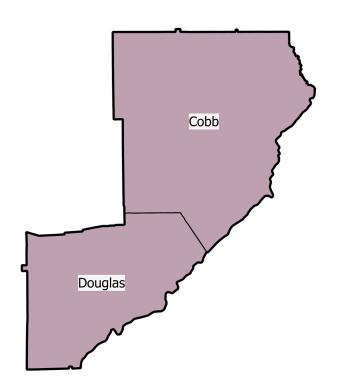






County	Number in Final Sample
Cobb	253
Douglas	105
District 3-1	358
District UTD Rate	94.1%
State of Georgia	6,191
State UTD Rate	94.7%







2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 358 adolescents in seventh grade from District 3-1 (Table 3-1-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 3-1 was 94.1% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 3-1-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (51.1% vs. 44.7%) (Table 3-1-A).

Of the 358 seventh graders sampled from District 3-1, 50.0% were male and 49.2% were female. The gender for three students (0.8%) was unknown or missing (Table 3-1-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 3-1-B).

None of the adolescents in the District 3-1 sample were found to have a medical exemption for one or more vaccinations. Eight adolescents (2.2%) had a religious exemption on file (Table 3-1-B).

Table 3-1-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 3-1, 2016

	State	District 3-1			
	Overall n=6,191 (%)	2016 n=358 (%)	Male n=179 (%)	Female n=176 (%)	
UTD rate*	94.7 ± 0.6	94.1 ± 2.4	92.7 ± 3.8	96.0 ± 2.9	
3 Hepatitis B	97.7 ± 0.4	99.2 ± 0.9	98.9 ± 1.5	100 ± 0.0	
2 MMR	97.6 ± 0.4	99.2 ± 0.9	98.9 ± 1.5	100 ± 0.0	
2 Varicella**	96.5 ± 0.5	96.4 ± 1.9	95.0 ± 3.2	98.3 ± 1.9	
1 Tdap	96.1 ± 0.5	95.3 ± 2.2	94.4 ± 3.4	96.6 ± 2.7	
1 MCV4	96.0 ± 0.5	95.5 ± 2.1	94.4 ± 3.4	97.2 ± 2.5	
4 Polio	96.0 ± 0.5	97.5 ± 1.6	97.2 ± 2.4	98.3 ± 1.9	
1 HPV	43.8 ± 1.2	48.0 ± 5.2	44.7 ± 7.3	51.1 ± 7.4	
3 HPV	14.5 ± 0.9	17.0 ± 3.9	18.4 ± 5.7	15.3 ± 5.3	

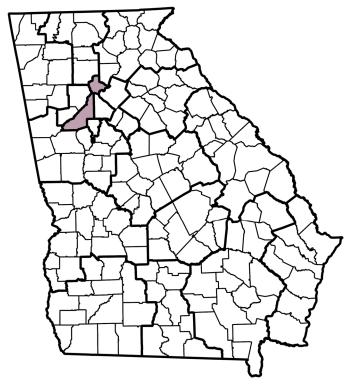
- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 3 students that had an unknown or missing gender status.

Table 3-1-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 3-1, 2016 (n=358)

	n	Percent of sample (%)	
Gender			
Male	179	50.0	
Female	176	49.2	
Missing or unknown gender	3	0.8	
School waiver			
Within waiver period	0	0	
Not within waiver period	358	100.0	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	358	100.0	
Religious Exemptions			
Religious exemption	8	2.2	
No religious exemption	350	97.8	







County	Number in Final Sample
Fulton	362
District 3-2	362
District UTD Rate	95.3%
State of Georgia	6,191
State UTD Rate	94.7%

District 3-2 Data Collection Team			
Saron Ephraim Immunization Program Consultant			





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 362 adolescents in seventh grade from District 3-2 (Table 3-2-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 3-2 was 95.3% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 3-2-A).

Coverage rates among male and female seventh graders were similar for all vaccines (Table 3-2-A).

Of the 362 seventh graders sampled from District 3-2, 47.0% were male and 51.4% were female. The gender for six students (1.7%) was unknown or missing (Table 3-2-B).

One student in the sample was found to be in the school "waiver" period, meaning they were incomplete due to being newly enrolled in school (Table 3-2-B).

None of the adolescents in the District 3-2 sample were found to have a medical exemption for one or more vaccinations. Seven adolescents (1.9%) had a religious exemption on file (Table 3-2-B).

Table 3-2-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 3-2, 2016

	State	District 3-2		
	Overall n=6,191 (%)	2016 n=362 (%)	Male n=170 (%)	Female n=186 (%)
UTD rate*	94.7 ± 0.6	95.3 ± 2.2	96.5 ± 2.8	95.2 ± 3.1
3 Hepatitis B	97.7 ± 0.4	97.5 ± 1.6	98.8 ± 1.6	97.3 ± 2.3
2 MMR	97.6 ± 0.4	97.5 ± 1.6	98.2 ± 2.0	97.8 ± 2.1
2 Varicella**	96.5 ± 0.5	96.7 ± 1.8	97.1 ± 2.5	97.3 ± 2.3
1 Tdap	96.1 ± 0.5	96.7 ± 1.8	97.6 ± 2.3	96.8 ± 2.5
1 MCV4	96.0 ± 0.5	97.0 ± 1.8	98.2 ± 2.0	96.8 ± 2.5
4 Polio	96.0 ± 0.5	96.4 ± 1.9	97.1 ± 2.5	96.8 ± 2.5
1 HPV	43.8 ± 1.2	43.1 ± 5.1	42.4 ± 7.4	44.6 ± 7.2
3 HPV	14.5 ± 0.9	11.9 ± 3.3	11.8 ± 4.9	12.4 ± 4.7

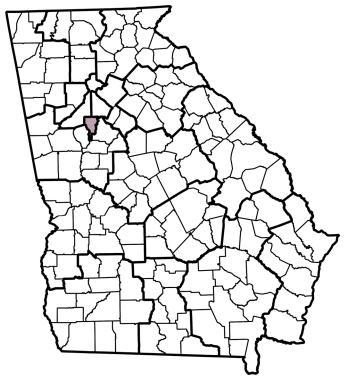
- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 6 students that had an unknown or missing gender status.

Table 3-2-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 3-2, 2016 (n=362)

, , ,				
n	Percent of sample (%)			
Gender				
170	47.0			
186	51.4			
6	1.7			
1	0.3			
361	99.7			
0	0			
362	100.0			
Religious Exemptions				
7	1.9			
355	98.1			
	170 186 6 1 361 0 362			







County	Number in Final Sample
Clayton	293
District 3-3	293
District UTD Rate	92.8%
State of Georgia	6,191
State UTD Rate	94.7%

District 3-3 Data Collection Team			
Antoinette Foster Immunization Program Consultant			





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 293 adolescents in seventh grade from District 3-3 (Table 3-3-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 3-3 was 92.8% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 3-3-A).

Coverage rates among male and female seventh graders were similar for all vaccines (Table 3-3-A).

Of the 293 seventh graders sampled from District 3-3, 54.3% were male and 39.2% were female. The gender for nineteen students (6.5%) was unknown or missing (Table 3-3-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 3-3-B).

Five (1.7%) of the adolescents in the District 3-3 sample were found to have a medical exemption for one or more vaccinations. Three adolescents (1.0%) had a religious exemption on file (Table 3-3-B).

Table 3-3-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 3-3, 2016

	State	District 3-3		
	Overall n=6,191 (%)	2016 n=293 (%)	Male n=159 (%)	Female n=115 (%)
UTD rate*	94.7 ± 0.6	92.8 ± 3.0	97.5 ± 2.4	96.5 ± 3.4
3 Hepatitis B	97.7 ± 0.4	95.6 ± 2.4	100 ± 0.0	99.1 ± 1.7
2 MMR	97.6 ± 0.4	95.2 ± 2.4	100 ± 0.0	99.1 ± 1.7
2 Varicella**	96.5 ± 0.5	94.5 ± 2.6	97.5 ± 2.4	99.1 ± 1.7
1 Tdap	96.1 ± 0.5	93.9 ± 2.8	98.1 ± 2.1	96.5 ± 3.4
1 MCV4	96.0 ± 0.5	93.9 ± 2.8	98.1 ± 2.1	96.5 ± 3.4
4 Polio	96.0 ± 0.5	94.2 ± 2.7	98.7 ± 1.7	96.5 ± 3.4
1 HPV	43.8 ± 1.2	57.7 ± 5.7	60.4 ± 7.6	60.0 ± 9.0
3 HPV	14.5 ± 0.9	16.7 ± 4.3	17.6 ± 5.9	17.4 ± 6.9

^{*} An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.

Table 3-3-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 3-3, 2016 (n=293)

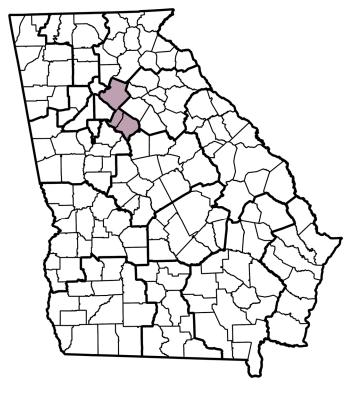
	n	Percent of sample (%)		
Gender				
Male	159	54.3		
Female	115	39.2		
Missing or unknown gender	19	6.5		
School waiver				
Within waiver period	0	0		
Not within waiver period	293	100.0		
Medical Exemptions				
Medical exemption	5	1.7		
No medical exemption	288	98.3		
Religious Exemptions				
Religious exemption	3	1.0		
No religious exemption	290	99.0		

^{**} Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.

There were 19 students that had an unknown or missing gender status.

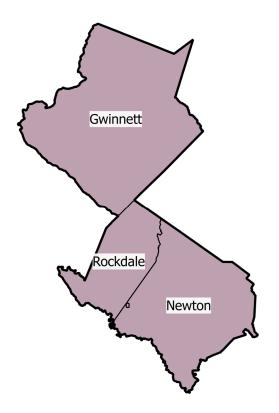






County	Number in Final Sample
Gwinnett	284
Newton	69
Rockdale	0
District 3-4	353
District UTD Rate	92.1%
State of Georgia	6,191
State UTD Rate	94.7%

District 3-4 Data Collection Team		
Valerie Pritchett	Immunization Program Consultant	





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 353 adolescents in seventh grade from District 3-4 (Table 3-4-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 3-4 was 92.1% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 3-4-A).

The UTD immunization rate for female seventh graders was higher than male seventh graders (97.0% vs. 92.0%). More female adolescents received 1 dose of HPV vaccine than male adolescents (43.5% vs. 37.7%) (Table 3-4-A).

Of the 353 seventh graders sampled from District 3-4, 49.6% were male and 47.6% were female. The gender for ten students (2.8%) was unknown or missing (Table 3-4-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 3-4-B).

Two (0.6%) of the adolescents in the District 3-4 sample were found to have a medical exemption for one or more vaccinations. Six adolescents (1.7%) had a religious exemption on file (Table 3-4-B).

Table 3-4-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 3-4, 2016

	State	District 3-4		
	Overall n=6,191 (%)	2016 n=353 (%)	Male n=175 (%)	Female n=168 (%)
UTD rate*	94.7 ± 0.6	92.1 ± 2.8	92.0 ± 4.0	97.0 ± 2.6
3 Hepatitis B	97.7 ± 0.4	96.3 ± 2.0	98.3 ± 1.9	99.4 ± 1.2
2 MMR	97.6 ± 0.4	96.0 ± 2.0	97.7 ± 2.2	99.4 ± 1.2
2 Varicella**	96.5 ± 0.5	95.5 ± 2.2	96.6 ± 2.7	99.4 ± 1.2
1 Tdap	96.1 ± 0.5	94.1 ± 2.5	96.0 ± 2.9	97.0 ± 2.6
1 MCV4	96.0 ± 0.5	93.8 ± 2.5	94.9 ± 3.3	97.6 ± 2.3
4 Polio	96.0 ± 0.5	93.2 ± 2.6	93.7 ± 3.6	97.6 ± 2.3
1 HPV	43.8 ± 1.2	39.4 ± 5.1	37.7 ± 7.2	43.5 ± 7.5
3 HPV	14.5 ± 0.9	15.6 ± 3.8	16.6 ± 5.5	15.5 ± 5.5

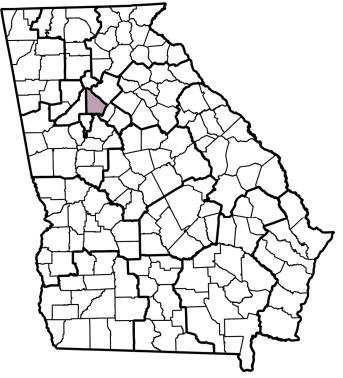
- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
 There were 10 students that had an unknown or missing gender status.

Table 3-4-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 3-4, 2016 (n=353)

	n	Percent of sample (%)	
Gender (70)			
Male	175	49.6	
Female	168	47.6	
Missing or unknown gender	10	2.8	
School waiver			
Within waiver period	0	0	
Not within waiver period	353	100.0	
Medical Exemptions			
Medical exemption	2	0.6	
No medical exemption	351	99.4	
Religious Exemptions			
Religious exemption	6	1.7	
No religious exemption	347	98.3	







County	Number in Final Sample
DeKalb	374
District 3-5	374
District UTD Rate	88.2%
State of Georgia	6,191
State UTD Rate	94.7%

District 3-5 Data Collection Team		
Janet Kelly	Immunization Program Consultant	





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 374 adolescents in seventh grade from District 3-5 (Table 3-5-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 3-5 was 88.2% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 3-5-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (20.2% vs 14.9%) (Table 3-5-A).

Of the 374 seventh graders sampled from District 3-5, 53.7% were male and 43.6% were female. The gender for ten students (2.7%) was unknown or missing (Table 3-5-B).

Eleven of the students in the sample were found to be in the school "waiver" period, meaning they were incomplete due to being newly enrolled in school (Table 3-5-B).

None of the adolescents in the District 3-5 sample were found to have a medical exemption for one or more vaccinations. Nine adolescents (2.4%) had a religious exemption on file (Table 3-5-B).

Table 3-5-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 3-5, 2016

	State		District 3-5	
	Overall n=6,191 (%)	2016 n=374 (%)	Male n=201 (%)	Female n=163 (%)
UTD rate*	94.7 ± 0.6	88.2 ± 3.3	88.6 ± 4.4	91.4 ± 4.3
3 Hepatitis B	97.7 ± 0.4	95.7 ± 2.1	97.0 ± 2.4	98.2 ± 2.1
2 MMR	97.6 ± 0.4	96.5 ± 1.9	98.0 ± 1.9	98.8 ± 1.7
2 Varicella**	96.5 ± 0.5	96.0 ± 2.0	98.0 ± 1.9	97.5 ± 2.4
1 Tdap	96.1 ± 0.5	92.2 ± 2.7	93.5 ± 3.4	94.5 ± 3.5
1 MCV4	96.0 ± 0.5	91.7 ± 2.8	93.0 ± 3.5	93.9 ± 3.7
4 Polio	96.0 ± 0.5	90.9 ± 2.9	90.5 ± 4.1	95.1 ± 3.3
1 HPV	43.8 ± 1.2	52.7 ± 5.1	55.2 ± 6.9	52.8 ± 7.7
3 HPV	14.5 ± 0.9	16.8 ± 3.8	14.9 ± 4.9	20.2 ± 6.2

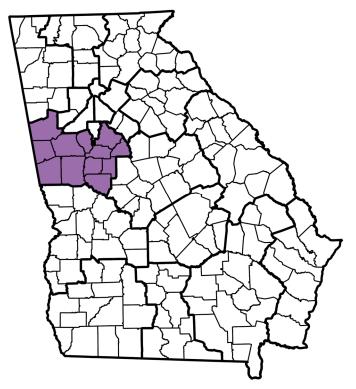
- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
 There were 10 students that had an unknown or missing gender status.

Table 3-5-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 3-5, 2016 (n=374)

alliong deorgia Adolescents—District 5-5, 2010 (II-5/4)			
	n	Percent of sample (%)	
Gender			
Male	201	53.7	
Female	163	43.6	
Missing or unknown gender	10	2.7	
School waiver			
Within waiver period	11	2.9	
Not within waiver period	363	97.1	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	374	100.0	
Religious Exemptions			
Religious exemption	9	2.4	
No religious exemption	365	97.6	







District 4-0 Data Collection Team		
Tina Dempsey	Immunization Program Consultant	

County	Number in Final Sample
Butts	0
Carroll	40
Coweta	55
Fayette	53
Heard	0
Henry	89
Lamar	12
Meriwether	13
Pike	14
Spalding	26
Troup	13
Upson	0
District 4-0	315
District UTD Rate	94.6%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 315 adolescents in seventh grade from District 4-0 (Table 4-0-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 4-0 was 94.6% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 4-0-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (40.2% vs. 34.5%) (Table 4-0-A).

Of the 315 seventh graders sampled from District 4-0, 46.0% were male and 52.1% were female. The gender for six students (1.9%) was unknown or missing (Table 4-0-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 4-0-B).

None of the adolescents in the District 4-0 sample were found to have a medical exemption for one or more vaccinations. Five adolescents (1.6%) had a religious exemption on file (Table 4-0-B).

Table 4-0-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 4-0, 2016

	State		District 4-0	
	Overall n=6,191 (%)	2016 n=315 (%)	Male n=145 (%)	Female n=164 (%)
UTD rate*	94.7 ± 0.6	94.6 ± 2.5	95.2 ± 3.5	94.5 ± 3.5
3 Hepatitis B	97.7 ± 0.4	98.1 ± 1.5	98.6 ± 1.9	98.2 ± 2.1
2 MMR	97.6 ± 0.4	97.8 ± 1.6	97.9 ± 2.3	98.2 ± 2.1
2 Varicella**	96.5 ± 0.5	96.5 ± 2.0	96.6 ± 3.0	97.0 ± 2.6
1 Tdap	96.1 ± 0.5	96.5 ± 2.0	96.6 ± 3.0	97.0 ± 2.6
1 MCV4	96.0 ± 0.5	96.8 ± 1.9	96.6 ± 3.0	97.6 ± 2.4
4 Polio	96.0 ± 0.5	96.8 ± 1.9	97.2 ± 2.7	97.0 ± 2.6
1 HPV	43.8 ± 1.2	37.1 ± 5.3	34.5 ± 7.7	40.2 ± 7.5
3 HPV	14.5 ± 0.9	12.4 ± 3.6	10.3 ± 5.0	14.6 ± 5.4

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 6 students that had an unknown or missing gender status.

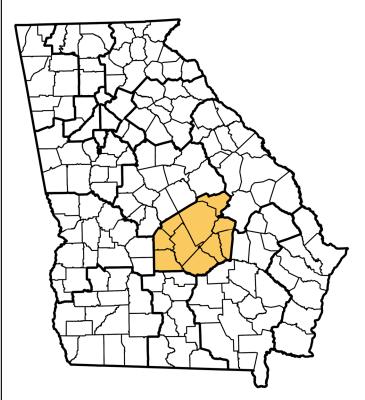
Table 4-0-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 4-0, 2016 (n=315)

	n	Percent of sample (%)	
Gender			
Male	145	46.0	
Female	164	52.1	
Missing or unknown gender	6	1.9	
School waiver			
Within waiver period	0	0	
Not within waiver period	315	100.0	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	315	100.0	
Religious Exemptions			
Religious exemption	5	1.6	
No religious exemption	310	98.4	



2016 Georgia Adolescent Immunization Study Report





г	\ict	rict	5 _1	Data	Calla	ction	Team
L	ภรเ	rict	D- I	vata	cone	ction	ı eam

DeAnna Brown

County	Number in Final Sample
Bleckley	23
Dodge	26
Johnson	24
Laurens	92
Montgomery	23
Pulaski	23
Telfair	23
Treutlen	24
Wheeler	23
Wilcox	23
District 5-1	304
District UTD Rate	97.7%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 304 adolescents in seventh grade from District 5-1 (Table 5-1-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 5-1 was 97.7% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 5-1-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (39.3% vs. 31.1%) (Table 5-1-A).

Of the 304 seventh graders sampled from District 5-1, 53.0% were male and 46.1% were female. The gender for three students (1.0%) was unknown or missing (Table 5-1-B).

Two of the students in the sample were found to be in the school "waiver" period, meaning they were incomplete due to being newly enrolled in school (Table 5-1-B).

One (0.3%) of the adolescents in the District 5-1 sample was found to have a medical exemption for one or more vaccinations. Two adolescents (0.7%) had a religious exemption on file (Table 5-1-B).

Table 5-1-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 5-1, 2016

	State		District 5-1		
	Overall n=6,191 (%)	2016 n=304 (%)	Male n=161 (%)	Female n=140 (%)	
UTD rate*	94.7 ± 0.6	97.7 ± 1.7	98.1 ± 2.1	98.6 ± 2.0	
3 Hepatitis B	97.7 ± 0.4	99.0 ± 1.1	100 ± 0.0	99.3 ± 1.4	
2 MMR	97.6 ± 0.4	99.0 ± 1.1	100 ± 0.0	99.3 ± 1.4	
2 Varicella**	96.5 ± 0.5	98.4 ± 1.4	100 ± 0.0	97.9 ± 2.4	
1 Tdap	96.1 ± 0.5	98.4 ± 1.4	98.8 ± 1.7	99.3 ± 1.4	
1 MCV4	96.0 ± 0.5	98.0 ± 1.6	98.1 ± 2.1	99.3 ± 1.4	
4 Polio	96.0 ± 0.5	98.7 ± 1.3	99.4 ± 1.2	99.3 ± 1.4	
1 HPV	43.8 ± 1.2	34.5 ± 5.4	31.1 ± 7.2	39.3 ± 8.1	
3 HPV	14.5 ± 0.9	12.2 ± 3.7	10.6 ± 4.8	14.3 ± 5.8	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 3 students that had an unknown or missing gender status.

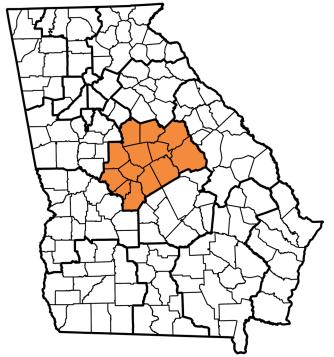
Table 5-1-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 5-1, 2016 (n=304)

	n	Percent of sample (%)
Gender		
Male	161	53.0
Female	140	46.1
Missing or unknown gender	3	1.0
School waiver		
Within waiver period	2	0.7
Not within waiver period	302	99.3
Medical Exemptions		
Medical exemption	1	0.3
No medical exemption	303	99.7
Religious Exemptions		
Religious exemption	2	0.7
No religious exemption	302	99.3



2016 Georgia Adolescent Immunization Study Report





District	5-2 [Data (Coll	lection	Team
----------	--------------	--------	------	---------	------

Kelly Duke

County	Number in Final Sample
Baldwin	26
Bibb	143
Crawford	0
Hancock	13
Houston	105
Jasper	0
Jones	26
Monroe	0
Peach	13
Putnam	26
Twiggs	9
Washington	27
Wilkinson	0
District 5-2	388
District UTD Rate	96.6%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 388 adolescents in seventh grade from District 5-2 (Table 5-2-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 5-2 was 96.6% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 5-2-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (48.1% vs. 38.5%) (Table 5-2-A).

Of the 388 seventh graders sampled from District 5-2, 51.5% were male and 47.7% were female. The gender for three students (0.8%) was unknown or missing (Table 5-2-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 5-2-B).

None of the adolescents in the District 5-2 sample were found to have a medical exemption for one or more vaccinations. Nine adolescents (2.3%) had a religious exemption on file (Table 5-2-B).

Table 5-2-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 5-2, 2016

	State		District 5-2		
	Overall n=6,191 (%)	2016 n=388 (%)	Male n=200 (%)	Female n=185 (%)	
UTD rate*	94.7 ± 0.6	96.6 ± 1.8	97.5 ± 2.2	96.8 ± 2.6	
3 Hepatitis B	97.7 ± 0.4	98.5 ± 1.2	99.0 ± 1.4	98.9 ± 1.5	
2 MMR	97.6 ± 0.4	97.9 ± 1.4	98.5 ± 1.7	98.4 ± 1.8	
2 Varicella**	96.5 ± 0.5	97.9 ± 1.4	98.5 ± 1.7	98.4 ± 1.8	
1 Tdap	96.1 ± 0.5	96.9 ± 1.7	98.0 ± 1.9	96.8 ± 2.6	
1 MCV4	96.0 ± 0.5	96.6 ± 1.8	97.5 ± 2.2	96.8 ± 2.6	
4 Polio	96.0 ± 0.5	97.4 ± 1.6	98.5 ± 1.7	97.3 ± 2.3	
1 HPV	43.8 ± 1.2	42.8 ± 4.9	38.5 ± 6.8	48.1 ± 7.2	
3 HPV	14.5 ± 0.9	16.8 ± 3.7	15.0 ± 5.0	18.9 ± 5.7	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 3 students that had an unknown or missing gender status.

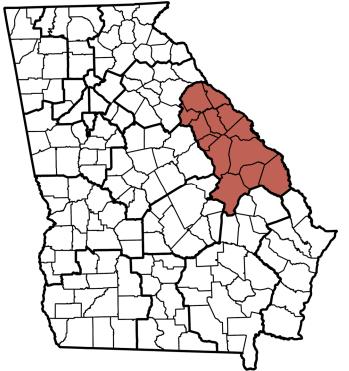
Table 5-2-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 5-2, 2016 (n=388)

among deorgia Adotesteries District 3 2, 2010 (ii 300)						
	n	Percent of sample (%)				
Gender						
Male	200	51.5				
Female	185	47.7				
Missing or unknown gender	3	0.8				
School waiver						
Within waiver period	0	0				
Not within waiver period	388	100.0				
Medical Exemptions						
Medical exemption	0	0				
No medical exemption	388	100.0				
Religious Exemptions						
Religious exemption	9	2.3				
No religious exemption	379	97.7				



2016 Georgia Adolescent Immunization Study Report

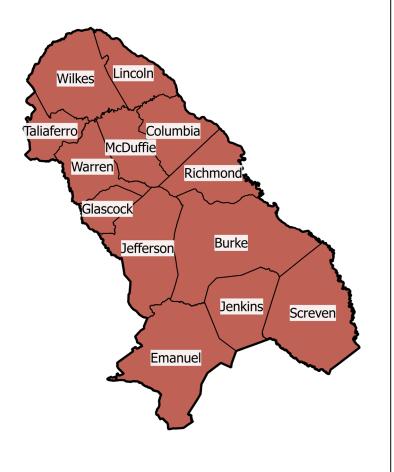




District	6-0	Data	Collection	Team

Sheila Fultz Immunization Program Consultant

County	Number in Final Sample
Burke	30
Columbia	65
Emanuel	38
Glascock	0
Jefferson	13
Jenkins	13
Lincoln	13
McDuffie	13
Richmond	100
Screven	11
Taliaferro	15
Warren	13
Wilkes	12
District 6-0	336
District UTD Rate	97.0%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 336 adolescents in seventh grade from District 6-0 (Table 6-0-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 6-0 was 97.0% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 6-0-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (62.9% vs. 36.8%). A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (19.5% vs 8.8%) (Table 6-0-A).

Of the 336 seventh graders sampled from District 6-0, 50.9% were male and 47.3% were female. The gender for six students (1.8%) was unknown or missing (Table 6-0-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 6-0-B).

None of the adolescents in the District 6-0 sample were found to have a medical exemption for one or more vaccinations. None adolescents had a religious exemption on file (Table 6-0-B).

Table 6-0-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 6-0, 2016

	State		District 6-0			
	Overall n=6,191 (%)	2016 n=336 (%)	Male n=171 (%)	Female n=159 (%)		
UTD rate*	94.7 ± 0.6	97.0 ± 1.8	97.1 ± 2.5	99.4 ± 1.2		
3 Hepatitis B	97.7 ± 0.4	98.8 ± 1.2	100 ± 0.0	100 ± 0.0		
2 MMR	97.6 ± 0.4	98.8 ± 1.2	99.4 ± 1.1	100 ± 0.0		
2 Varicella**	96.5 ± 0.5	97.6 ± 1.6	98.2 ± 2.0	98.7 ± 1.7		
1 Tdap	96.1 ± 0.5	98.8 ± 1.2	99.4 ± 1.1	100 ± 0.0		
1 MCV4	96.0 ± 0.5	98.8 ± 1.2	99.4 ± 1.1	100 ± 0.0		
4 Polio	96.0 ± 0.5	98.2 ± 1.4	98.2 ± 2.0	100 ± 0.0		
1 HPV	43.8 ± 1.2	49.1 ± 5.4	36.8 ± 7.2	62.9 ± 7.5		
3 HPV	14.5 ± 0.9	14.0 ± 3.7	8.8 ± 4.2	19.5 ± 6.2		

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 6 students that had an unknown or missing gender status.

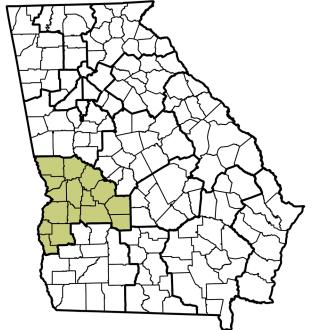
Table 6-0-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 6-0, 2016 (n=336)

and the second s							
	n	Percent of sample (%)					
Gender							
Male	171	50.9					
Female	159	47.3					
Missing or unknown gender	6	1.8					
School waiver							
Within waiver period	0	0					
Not within waiver period	336	100.0					
Medical Exemptions							
Medical exemption	0	0					
No medical exemption	336	100.0					
Religious Exemptions							
Religious exemption	0	0					
No religious exemption	336	100.0					



2016 Georgia Adolescent Immunization Study Report





District 7-0 Data Collection Team

Kelly Seegmuller

County	Number in Final Sample
Chattahoochee	14
Clay	12
Crisp	25
Dooly	26
Harris	16
Macon	17
Marion	11
Muscogee	139
Quitman	12
Randolph	0
Schley	2
Stewart	11
Sumter	22
Talbot	0
Taylor	11
Webster	0
District 7-0	318
District UTD Rate	89.6%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 318 adolescents in seventh grade from District 7-0 (Table 7-0-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 7-0 was 89.6% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 7-0-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (44.2% vs. 35.7%) (Table 7-0-A).

Of the 318 seventh graders sampled from District 7-0, 49.4% were male and 48.4% were female. The gender for seven students (2.2%) was unknown or missing (Table 7-0-B).

One student in the sample was found to be in the school "waiver" period, meaning they were incomplete due to being newly enrolled in school (Table 7-0-B).

One (0.3%) of the adolescents in the District 7-0 sample was found to have a medical exemption for one or more vaccinations. Three adolescents (0.9%) had a religious exemption on file (Table 7-0-B).

Table 7-0-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 7-0, 2016

	State		District 7-0	
	Overall n=6,191 (%)	2016 n=318 (%)	Male n=157 (%)	Female n=154 (%)
UTD rate*	94.7 ± 0.6	89.6 ± 3.4	88.5 ± 5.0	93.5 ± 3.9
3 Hepatitis B	97.7 ± 0.4	94.7 ± 2.5	94.9 ± 3.4	96.8 ± 2.8
2 MMR	97.6 ± 0.4	94.3 ± 2.5	93.6 ± 3.8	96.8 ± 2.8
2 Varicella**	96.5 ± 0.5	94.3 ± 2.5	93.6 ± 3.8	96.1 ± 3.1
1 Tdap	96.1 ± 0.5	94.0 ± 2.6	93.0 ± 4.0	96.1 ± 3.1
1 MCV4	96.0 ± 0.5	93.7 ± 2.7	93.0 ± 4.0	95.5 ± 3.3
4 Polio	96.0 ± 0.5	93.7 ± 2.7	93.0 ± 4.0	95.5 ± 3.3
1 HPV	43.8 ± 1.2	39.0 ± 5.4	35.7 ± 7.5	44.2 ± 7.9
3 HPV	14.5 ± 0.9	12.9 ± 3.7	11.5 ± 5.0	14.9 ± 5.6

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 7 students that had an unknown or missing gender status.

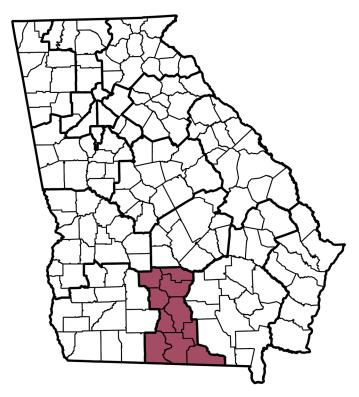
Table 7-0-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 7-0, 2016 (n=318)

		, , ,	
	n	Percent of sample (%)	
Gender			
Male	157	49.4	
Female	154	48.4	
Missing or unknown gender	7	2.2	
School waiver			
Within waiver period	1	0.3	
Not within waiver period	317	99.7	
Medical Exemptions			
Medical exemption	1	0.3	
No medical exemption	317	99.7	
Religious Exemptions			
Religious exemption	3	0.9	
No religious exemption	315	99.1	



2016 Georgia Adolescent Immunization Study Report

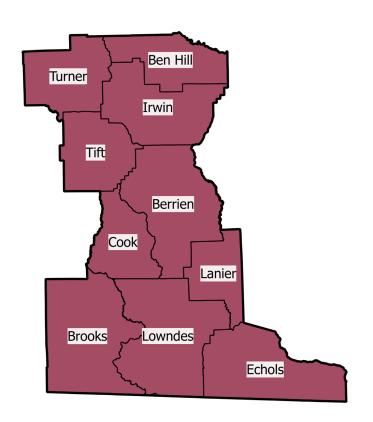




District 8-1 Data Collection Team

Jenny Howell

County	Number in Final Sample
Ben Hill	23
Berrien	25
Brooks	23
Cook	23
Echols	23
Irwin	23
Lanier	23
Lowndes	115
Tift	46
Turner	23
District 8-1	347
District UTD Rate	97.7%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 347 adolescents in seventh grade from District 8-1 (Table 8-1-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 8-1 was 97.7% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 8-1-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. A higher number of male adolescents received 3 doses of HPV vaccine than female adolescents (21.3% vs 15.9%) (Table 8-1-A).

Of the 347 seventh graders sampled from District 8-1, 50.1% were male and 47.3% were female. The gender for nine students (2.6%) was unknown or missing (Table 8-1-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 8-1-B).

None of the adolescents in the District 8-1 sample were found to have a medical exemption for one or more vaccinations. Four adolescents (1.2%) had a religious exemption on file (Table 8-1-B).

Table 8-1-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 8-1, 2016

	State		District 8-1	
	Overall n=6,191 (%)	2016 n=347 (%)	Male n=174 (%)	Female n=164 (%)
UTD rate*	94.7 ± 0.6	97.7 ± 1.6	100 ± 0.0	97.0 ± 2.6
3 Hepatitis B	97.7 ± 0.4	98.8 ± 1.1	100 ± 0.0	98.8 ± 1.7
2 MMR	97.6 ± 0.4	98.6 ± 1.3	100 ± 0.0	98.2 ± 2.1
2 Varicella**	96.5 ± 0.5	98.0 ± 1.5	100 ± 0.0	97.6 ± 2.4
1 Tdap	96.1 ± 0.5	98.6 ± 1.3	100 ± 0.0	98.2 ± 2.1
1 MCV4	96.0 ± 0.5	98.6 ± 1.3	100 ± 0.0	98.2 ± 2.1
4 Polio	96.0 ± 0.5	96.0 ± 2.1	96.6 ± 2.7	96.3 ± 2.9
1 HPV	43.8 ± 1.2	43.2 ± 5.2	43.1 ± 7.4	43.3 ± 7.6
3 HPV	14.5 ± 0.9	18.4 ± 4.1	21.3 ± 6.1	15.9 ± 5.6

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 9 students that had an unknown or missing gender status.

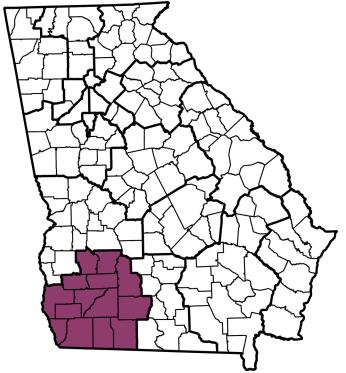
Table 8-1-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 8-1, 2016 (n=347)

	n	Percent of sample (%)	
Gender			
Male	174	50.1	
Female	164	47.3	
Missing or unknown gender	9	2.6	
School waiver			
Within waiver period	0	0	
Not within waiver period	347	100.0	
Medical Exemptions			
Medical exemption	0	0	
No medical exemption	347	100.0	
Religious Exemptions			
Religious exemption	4	1.2	
No religious exemption	343	98.8	



2016 Georgia Adolescent Immunization Study Report





District 8-2 Data Collection Team		
Lisa Jenkins	Immunization Program Consultant	

County	Number in Final Sample
Baker	12
Calhoun	24
Colquitt	13
Decatur	24
Dougherty	60
Early	24
Grady	36
Lee	12
Miller	12
Mitchell	48
Seminole	12
Terrell	12
Thomas	40
Worth	12
District 8-2	341
District UTD Rate	99.1%
State of Georgia	6,191
State UTD Rate	94.7%





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 341 adolescents in seventh grade from District 8-2 (Table 8-2-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 8-2 was 99.1% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 8-2-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (60.5% vs. 49.1%) (Table 8-2-A).

Of the 341 seventh graders sampled from District 8-2, 47.2% were male and 51.9% were female. The gender for three students (0.9%) was unknown or missing (Table 8-2-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 8-2-B).

None of the adolescents in the District 8-2 sample were found to have a medical exemption for one or more vaccinations. None adolescents had a religious exemption on file (Table 8-2-B).

Table 8-2-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 8-2, 2016

	State		District 8-2	
	Overall n=6,191 (%)	2016 n=341 (%)	Male n=161 (%)	Female n=177 (%)
UTD rate*	94.7 ± 0.6	99.1 ± 1.0	98.8 ± 1.7	99.4 ± 1.1
3 Hepatitis B	97.7 ± 0.4	100 ± 0.0	100 ± 0.0	100 ± 0.0
2 MMR	97.6 ± 0.4	100 ± 0.0	100 ± 0.0	100 ± 0.0
2 Varicella**	96.5 ± 0.5	99.4 ± 0.8	99.4 ± 1.2	99.4 ± 1.1
1 Tdap	96.1 ± 0.5	99.7 ± 0.6	99.4 ± 1.2	100 ± 0.0
1 MCV4	96.0 ± 0.5	100 ± 0.0	100 ± 0.0	100 ± 0.0
4 Polio	96.0 ± 0.5	100 ± 0.0	100 ± 0.0	100 ± 0.0
1 HPV	43.8 ± 1.2	55.1 ± 5.3	49.1 ± 7.7	60.5 ± 7.2
3 HPV	14.5 ± 0.9	17.3 ± 4.0	15.5 ± 5.6	19.2 ± 5.8

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 3 students that had an unknown or missing gender status.

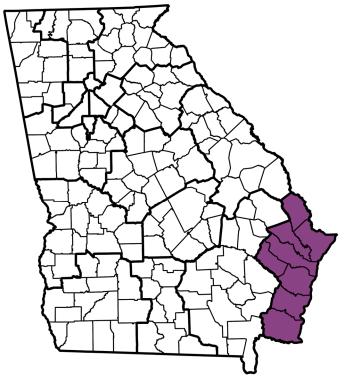
Table 8-2-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 8-2, 2016 (n=341)

among deorgia /tablescents District o 2, 2010 (ii 311)		
	n	Percent of sample (%)
Gender		
Male	161	47.2
Female	177	51.9
Missing or unknown gender	3	0.9
School waiver		
Within waiver period	0	0
Not within waiver period	341	100.0
Medical Exemptions		
Medical exemption	0	0
No medical exemption	341	100.0
Religious Exemptions		
Religious exemption	0	0
No religious exemption	341	100.0



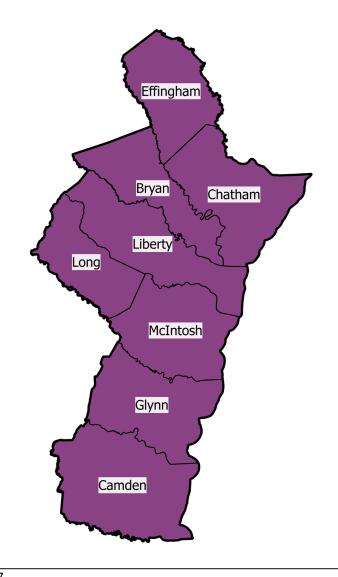
2016 Georgia Adolescent Immunization Study Report





	U
County	Number in Final Sample
Bryan	0
Camden	4
Chatham	237
Effingham	24
Glynn	41
Liberty	26
Long	12
McIntosh	0
District 9-1	344
District UTD Rate	94.8
State of Georgia	6,191
State UTD Rate	94.7%

District 9-1 Data Collection Team		
Kimberly Skinner	Immunization Program Consultant	





2016 Georgia Adolescent Immunization Study Report



The 2016 GAIS sampled 344 adolescents in seventh grade from District 9-1 (Table 9-1-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 9-1 was 94.8% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 9-1-A).

Coverage rates among male and female seventh graders were similar for all vaccines (Table 9-1-A).

Of the 344 seventh graders sampled from District 9-1, 50.6% were male and 45.1% were female. The gender for fifteen students (4.4%) was unknown or missing (Table 9-1-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 9-1-B).

None of the adolescents in the District 9-1 sample were found to have a medical exemption for one or more vaccinations. Seven adolescents (2.0%) had a religious exemption on file (Table 9-1-B).

Table 9-1-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 9-1, 2016

	State	District 9-1			
	Overall n=6,191 (%)	2016 n=344 (%)	Male n=174 (%)	Female n=155 (%)	
UTD rate*	94.7 ± 0.6	94.8 ± 2.4	96.0 ± 2.9	96.1 ± 3.0	
3 Hepatitis B	97.7 ± 0.4	97.7 ± 1.6	99.4 ± 1.1	98.7 ± 1.8	
2 MMR	97.6 ± 0.4	97.7 ± 1.6	99.4 ± 1.1	98.7 ± 1.8	
2 Varicella**	96.5 ± 0.5	95.1 ± 2.3	97.1 ± 2.5	96.8 ± 2.8	
1 Tdap	96.1 ± 0.5	95.9 ± 2.1	97.1 ± 2.5	97.4 ± 2.5	
1 MCV4	96.0 ± 0.5	95.3 ± 2.2	96.6 ± 2.7	96.8 ± 2.8	
4 Polio	96.0 ± 0.5	95.3 ± 2.2	97.1 ± 2.5	96.1 ± 3.0	
1 HPV	43.8 ± 1.2	43.6 ± 5.2	46.0 ± 7.4	43.2 ± 7.8	
3 HPV	14.5 ± 0.9	14.5 ± 3.7	14.9 ± 5.3	15.5 ± 5.7	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 15 students that had an unknown or missing gender status.

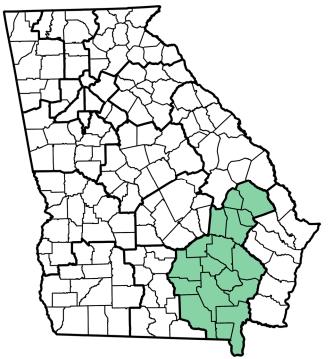
Table 9-1-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 9-1, 2016 (n=344)

	n	Percent of sample (%)		
Gender				
Male	174	50.6		
Female	155	45.1		
Missing or unknown gender	15	4.4		
School waiver				
Within waiver period	0	0		
Not within waiver period	344	100.0		
Medical Exemptions				
Medical exemption	0	0		
No medical exemption	344	100.0		
Religious Exemptions				
Religious exemption	7	0		
No religious exemption	337	98.0		



2016 Georgia Adolescent Immunization Study Report





D	istri	ct 9	-2 D	ata C	ollect	tion '	Team
				utu t	.0116		I C GIII

Lorie Banks

County	Number in Final Sample
Appling	24
Atkinson	12
Bacon	12
Brantley	12
Bulloch	79
Candler	12
Charlton	12
Clinch	12
Coffee	12
Evans	12
Jeff Davis	12
Pierce	12
Tattnall	36
Toombs	36
Ware	36
Wayne	24
District 9-2	355
District UTD Rate	96.9%
State of Georgia	6,191
State UTD Rate	94.7%





Report

2016 Georgia Adolescent Immunization Study Report

The 2016 GAIS sampled 355 adolescents in seventh grade from District 9-2 (Table 9-2-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 9-2 was 96.9% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 9-2-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (18.0% vs 11.6%) (Table 9-2-A).

Of the 355 seventh graders sampled from District 9-2, 48.7% were male and 48.5% were female. The gender for ten students (2.8%) was unknown or missing (Table 9-2-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 9-2-B).

One (0.3%) of the adolescents in the District 9-2 sample was found to have a medical exemption for one or more vaccinations. Two adolescents (0.6%) had a religious exemption on file (Table 9-2-B).

Table 9-2-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 9-2, 2016

	State	District 9-2			
	Overall n=6,191 (%)	2016 n=355 (%)	Male n=173 (%)	Female n=172 (%)	
UTD rate*	94.7 ± 0.6	96.9 ± 1.8	97.1 ± 2.5	98.3 ± 2.0	
3 Hepatitis B	97.7 ± 0.4	98.6 ± 1.2	98.8 ± 1.6	100 ± 0.0	
2 MMR	97.6 ± 0.4	99.2 ± 1.0	100 ± 0.0	100 ± 0.0	
2 Varicella**	96.5 ± 0.5	98.3 ± 1.3	98.8 ± 1.6	99.4 ± 1.1	
1 Tdap	96.1 ± 0.5	97.5 ± 1.6	98.3 ± 1.9	98.3 ± 2.0	
1 MCV4	96.0 ± 0.5	98.0 ± 1.4	98.8 ± 1.6	98.8 ± 1.6	
4 Polio	96.0 ± 0.5	97.7 ± 1.5	99.4 ± 1.1	97.7 ± 2.3	
1 HPV	43.8 ± 1.2	44.5 ± 5.2	45.1 ± 7.4	45.9 ± 7.5	
3 HPV	14.5 ± 0.9	14.6 ± 3.7	11.6 ± 4.8	18.0 ± 5.8	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
 There were 10 students that had an unknown or missing gender status.

Table 9-2-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 9-2, 2016 (n=355)

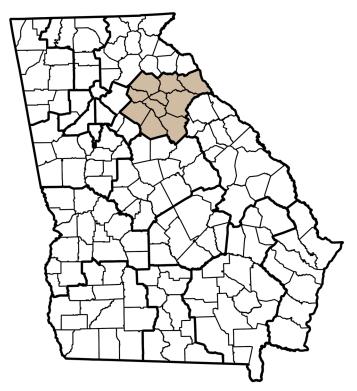
uniong deorgia Adoteseenes Bischiet 7 2, 2010 (ii 333)					
	n	Percent of sample (%)			
Gender					
Male	173	48.7			
Female	172	48.5			
Missing or unknown gender	10	2.8			
School waiver					
Within waiver period	0	0			
Not within waiver period	355	100.0			
Medical Exemptions					
Medical exemption	1	0.3			
No medical exemption	354	99.7			
Religious Exemptions					
Religious exemption	2	0.6			
No religious exemption	353	99.4			



District 10

2016 Georgia Adolescent Immunization Study Report





District 10 Data Collection Team		
Angie Webster	Immunization Program Consultant	

County	Number in Final Sample
Barrow	70
Clarke	54
Elbert	1
Greene	39
Jackson	43
Madison	13
Morgan	65
Oconee	65
Oglethrope	13
Walton	72
District 10	370
District UTD Rate	95.7%
State of Georgia	6,191
State UTD Rate	94.7%





District 10

10

2016 Georgia Adolescent Immunization Study Report

The 2016 GAIS sampled 370 adolescents in seventh grade from District 10 (Table 10-A).

An adolescent was considered up-to-date (UTD) if they received at least 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4 vaccines by the time they enrolled in school. The UTD immunization rate for seventh graders in District 10 was 95.7% for 2016. Immunization rates that decreased from the previous year are shown **bolded** (Table 10-A).

Coverage rates among male and female seventh graders were similar for all vaccines except HPV. More female adolescents received 1 dose of HPV vaccine than male adolescents (44.9% vs. 33.1%). A higher number of female adolescents received 3 doses of HPV vaccine than male adolescents (17.6% vs 10.1%) (Table 10-A).

Of the 370 seventh graders sampled from District 10, 48.1% were male and 50.5% were female. The gender for five students (1.4%) was unknown or missing (Table 10-B).

None of the students in the sample were found to be in the school "waiver" period, meaning that no student was incomplete due to being newly enrolled in school (Table 10-B).

None of the adolescents in the District 10 sample were found to have a medical exemption for one or more vaccinations. Eleven adolescents (3.0%) had a religious exemption on file (Table 10-B).

Table 10-A: Georgia Adolescent Immunization Coverage Rates by Vaccine Antigen and Gender—District 10, 2016

	State	District 10			
	Overall n=6,191 (%)	2016 n=370 (%)	Male n=178 (%)	Female n=187 (%)	
UTD rate*	94.7 ± 0.6	95.7 ± 2.1	94.9 ± 3.2	96.3 ± 2.7	
3 Hepatitis B	97.7 ± 0.4	98.4 ± 1.3	97.8 ± 2.2	98.9 ± 1.5	
2 MMR	97.6 ± 0.4	98.1 ± 1.4	97.2 ± 2.4	98.9 ± 1.5	
2 Varicella**	96.5 ± 0.5	95.7 ± 2.1	93.8 ± 3.5	97.3 ± 2.3	
1 Tdap	96.1 ± 0.5	96.8 ± 1.8	96.1 ± 2.9	97.3 ± 2.3	
1 MCV4	96.0 ± 0.5	96.2 ± 1.9	94.9 ± 3.2	97.3 ± 2.3	
4 Polio	96.0 ± 0.5	96.8 ± 1.8	95.5 ± 3.0	97.9 ± 2.1	
1 HPV	43.8 ± 1.2	39.5 ± 5.0	33.1 ± 6.9	44.9 ± 7.1	
3 HPV	14.5 ± 0.9	14.1 ± 3.5	10.1 ± 4.4	17.6 ± 5.5	

- * An adolescent was classified as UTD if they had received at least the following vaccine doses: 3 Hepatitis B, 2 MMR, 2 Varicella, 1 Tdap and 1 MCV4.
- ** Physician diagnosed or history of varicella illness were not included in the Varicella coverage rate. However, they were included in the UTD rate.
- There were 5 students that had an unknown or missing gender status.

Table 10-B: Gender, School Waiver and Exemptions among Georgia Adolescents—District 10, 2016 (n=370)

	n	Percent of sample (%)			
Gender					
Male	178	48.1			
Female	187	50.5			
Missing or unknown gender	5	1.4			
School waiver					
Within waiver period	0	0			
Not within waiver period	370	100.0			
Medical Exemptions					
Medical exemption	0	0			
No medical exemption	370	100.0			
Religious Exemptions					
Religious exemption	11	3.0			
No religious exemption	359	97.0			



Appendix A: Margins of Error

Appendix Table A: Margin of Error for UTD Immunization Rates by District, Georgia, 2016							
District	Sample Rate Rate Error* Interv				95% Confid Interva (%)		
1-1 Northwest (Rome)	363	96.1	3.9	2.0	94.2 -	98.1	
1-2 North Georgia (Dalton)	326	90.5	9.5	3.2	87.3 -	93.7	
2-0 North (Gainesville)	344	94.8	5.2	2.4	92.4 -	97.1	
3-1 Cobb-Douglas	358	94.1	5.9	2.4	91.7 -	96.6	
3-2 Fulton	362	95.3	4.7	2.2	93.1 -	97.5	
3-3 Clayton	293	92.8	7.2	3.0	89.9 -	95.8	
3-4 Gwinnett, Newton, Rockdale	353	92.1	7.9	2.8	89.2 -	94.9	
3-5 DeKalb	374	88.2	11.8	3.3	85.0 -	91.5	
4-0 LaGrange	315	94.6	5.4	2.5	92.1 -	97.1	
5-1 South Central (Dublin)	304	97.7	2.3	1.7	96.0 -	99.4	
5-2 North Central (Macon)	388	96.6	3.4	1.8	94.9 -	98.4	
6-0 East Central (Augusta)	336	97.0	3.0	1.8	95.2 -	98.9	
7-0 West Central (Columbus)	318	89.6	10.4	3.4	86.3 -	93.0	
8-1 South (Valdosta)	347	97.7	2.3	1.6	96.1 -	99.3	
8-2 Southwest (Albany)	341	99.1	0.9	1.0	98.1 -	100.0	
9-1 Coastal (Savannah)	344	94.8	5.2	2.4	92.4 -	97.1	
9-2 Southeast (Waycross)	355	96.9	3.1	1.8	95.1 -	98.7	
10-0 Northeast (Athens)	370	95.7	4.3	2.1	93.6 -	97.8	
Georgia	6,191	94.7	5.3	0.6	94.1 -	95.3	

^{*}The margin of error (MOE) is a statistic conveying the amount of random sampling error in a survey's results. It expresses the maximum expected difference between the true population parameter and a sample estimate of that parameter. The larger the MOE around an estimated value, the less accurate the estimated value is.

Appendix B: Frequency of Exemptions

Appendix Table B: Frequency of Exemptions and Within School Waiver Period Status by District, Georgia, 2016

	GC01514, 2010							
District	Final Sample	Religious Exemption	Medical Exemption	Within School Waiver Period	Total			
1-1 Northwest (Rome)	363	8	0	0	8			
1-2 North Georgia (Dalton)	326	17	0	0	17			
2-0 North (Gainesville)	344	14	0	0	14			
3-1 Cobb-Douglas	358	8	0	0	8			
3-2 Fulton	362	7	0	1	8			
3-3 Clayton	293	3	5	0	8			
3-4 Gwinnett, Newton, Rockdale	353	6	2	0	8			
3-5 DeKalb	374	9	0	11	20			
4-0 LaGrange	315	5	0	0	5			
5-1 South Central (Dublin)	304	2	1	2	5			
5-2 North Central (Macon)	388	9	0	0	9			
6-0 East Central (Augusta)	336	0	0	0	0			
7-0 West Central (Columbus)	318	3	1	1	5			
8-1 South (Valdosta)	347	4	0	0	4			
8-2 Southwest (Albany)	341	0	0	0	0			
9-1 Coastal (Savannah)	344	7	0	0	7			
9-2 Southeast (Waycross)	355	2	1	0	3			
10-0 Northeast (Athens)	370	11	0	0	11			
Georgia	6,191	115	10	15	129			

Appendix C: District Immunization Measures by Vaccine-Antigen

Appendix Table C: Vaccine Antigen-Specific Immunization Measures by District, Georgia 2016 Highest Rate								
District	3 Hep B (%)	2 MMR (%)	2 Varicella (%)	1 Tdap (%)	1 MCV4 (%)	4 Polio (%)	1 HPV (%)	3 HPV (%)
1-1 Northwest (Rome)	98.6	98.3	97.0	97.2	97.2	97.0	43.8	9.9
1-2 North Georgia (Dalton)	96.0	95.1	93.9	92.6	91.4	92.0	39.9	14.1
2-0 North (Gainesville)	97.4	96.8	95.9	94.8	95.1	95.3	34.9	11.3
3-1 Cobb-Douglas	99.2	99.2	96.4	95.3	95.5	97.5	48.0	17.0
3-2 Fulton	97.5	97.5	96.7	96.7	97.0	96.4	43.1	11.9
3-3 Clayton	95.6	95.2	94.5	93.9	93.9	94.2	57.7	16.7
3-4 East Metro (Lawrenceville	96.3	96.0	95.5	94.1	93.8	93.2	39.4	15.6
3-5 DeKalb	95.7	96.5	96.0	92.2	91.7	90.9	52.7	16.8
4-0 LaGrange	98.1	97.8	96.5	96.5	96.8	96.8	37.1	12.4
5-1 South Central (Dublin)	99.0	99.0	98.4	98.4	98.0	98.7	34.5	12.2
5-2 North Central (Macon)	98.5	97.9	97.9	96.9	96.6	97.4	42.8	16.8
6-0 East Central (Augusta)	98.8	98.8	97.6	98.8	98.8	98.2	49.1	14.0
7-0 West Central (Columbus)	94.7	94.3	94.3	94.0	93.7	93.7	39.0	12.9
8-1 South (Valdosta)	98.8	98.6	98.0	98.6	98.6	96.0	43.2	18.4
8-2 Southwest (Albany)	100.0	100.0	99.4	99.7	100.0	100.0	55.1	17.3
9-1 Coastal (Savannah)	97.7	97.7	95.1	95.9	95.3	95.3	43.6	14.5
9-2 Southeast (Waycross)	98.6	99.2	98.3	97.5	98.0	97.7	44.5	14.6
10-0 Northeast (Athens)	98.4	98.1	95.7	96.8	96.2	96.8	39.5	14.1
Georgia	97.7	97.6	96.5	96.1	90.6	96.0	43.8	14.5

Additional Resources

For more information about the Georgia Department of Public Health Immunization Program, please visit the following website: http://dph.georgia.gov/immunization-section

For past Georgia Immunization Study Final Reports, please visit the following website: http://dph.georgia.gov/immunization-publications

For more information about the Georgia Department of Public Health Acute Disease Epidemiology Unit, please visit the following website: http://dph.georgia.gov/acute-disease-epidemiology

For more information about the Centers for Disease Control and Prevention's (CDC) National Immunization Survey (NIS), please visit the following website: http://www.cdc.gov/nchs/nis.htm

To access current vaccine schedules, vaccine information sheets and other immunization materials, please visit the Immunization Action Coalition website: http://www.immunize.org

For questions relating to this document, please email the author at Fabio.Machado@dph.ga.gov