

ALLEGHENY COUNTY
HEALTH DEPARTMENT

SCHOOL
IMMUNIZATION
REPORT
2021-2022



ALLEGHENY COUNTY SCHOOL IMMUNIZATION REPORT 2021-2022

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**ALLEGHENY COUNTY HEALTH DEPARTMENT
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Debra Bogen, MD, Director

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Report prepared by:

Leah Pope, MPH

Applied Epidemiologist
Allegheny County Health Department

Kristen Mertz, MD, MPH

Medical Epidemiologist
Allegheny County Health Department

Please address questions or comments to:

Allegheny County Health Department

Bureau of Data, Reporting, and Disease Control
542 Fourth Ave.
Pittsburgh, PA 15219
412-687-2243

<https://www.alleghenycounty.us/Health-Department/Resources/Data-and-Reporting/Chronic-Disease-Epidemiology/Contact.aspx>

EXECUTIVE SUMMARY

To ensure that schools in Allegheny County are complying with state and county immunization regulations, the Allegheny County Health Department (ACHD) requires all schools (public, private/independent, parochial/religious, and charter) to submit the immunization status of their students annually.

This report summarizes the immunization data from the 2021-2022 school year in Allegheny County. It is organized into four parts: overall immunization status, provisional enrollment, immunization exemptions, and immunization status by type of vaccine. Data are primarily presented by school type or by grade. Also included are data from previous school years.

Highlights:

- The percentage of students with all immunizations required for school entry was 95.3% in December 2021, which is above the *Healthy People 2020* national goal of 95% coverage.
- The grades that did not exceed 95% complete immunization coverage were kindergarten (94.3%), 7th grade (92.0%), and 12th grade (90.5%). Additional doses of certain vaccines are required to enter 7th and 12th grades.
- The majority of Allegheny County schools (65.5 %) had at least 95% of their students fully immunized.
- In Allegheny County, 1.6% of all students started school in the fall with provisional enrollment status; kindergarten (2.7%), 7th grade (4.0%), and 12th grade (5.0%) had higher percentages of students enrolled provisionally due to new or additional immunization requirements upon entering those grade levels.
- Overall, 3.1% of students submitted medical or religious/moral exemptions. Students at parochial/religious schools (5.1%) and private/independent schools (5.0%) had the highest percentage of exemptions.

INTRODUCTION

To maintain healthy students and communities, all students enrolled in Kindergarten through 12th grade in Allegheny County are required to have the appropriate number of doses of the diphtheria, tetanus, and pertussis (DTaP), hepatitis B (HBV), measles, mumps, and rubella (MMR), polio, and varicella (VZV) vaccines.¹ For students enrolled in 7th grade, two additional vaccines are required at a single dose each: tetanus, diphtheria, and pertussis (Tdap) and meningococcal (MCV4).¹ An additional dose of MCV4 is required for all 12th graders.²

Provisional enrollment allows students who have at least one dose in a multi-dose vaccine series to start the school year if there is an explicit plan in place, for either receiving or scheduling the remaining required doses, within the five-day provisional period. If the provisional period expires before the student receives or is scheduled to receive all required doses, the student is to be denied admission to school. The provisional period was shortened from 8 months to 5 days beginning with school year 2017-18.

Students may also be admitted to school without being fully immunized if their parents have submitted paperwork claiming an exemption. Exemptions can either be medical, religious, or moral/philosophical, and they do not expire as provisional enrollment does. Medical exemptions can be obtained for students who have a condition for which a vaccine is contraindicated and must be documented by the student's physician. Religious and moral exemptions are submitted in writing by the student's parent or guardian. Students experiencing homelessness are exempt under the McKinney-Vento Act.

ACHD requires all schools (public, private/independent, parochial/religious, and charter) to submit data each school year detailing total enrollment, number of students fully immunized, number of students enrolled provisionally, and the number of students with medical or religious/moral exemptions, per Article X of ACHD's Rules and Regulations.¹ ACHD collects data on every grade to get a more comprehensive view of the immunization coverage at all grade levels. The Pennsylvania Department of Health (PADOH) collects data on kindergarten, 7th grade, and 12th grade students in December from every school in the state each school year.²

¹ Allegheny County Health Department, *Article X: School Health Immunization*. (Accessed August 31, 2020); available from https://alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Article-10-School-Immunizations.pdf

² Commonwealth of Pennsylvania, 28 Pa. Code Part III, Ch 23, Subch C §23.86. *School Reporting*. (Accessed July 24, 2018), available from <http://www.pacode.com/secure/data/028/chapter23/subchapCtoc.html>

Vaccines recommended for children by the Advisory Committee on Immunization Practices but not required for school entry in Pennsylvania include those for rotavirus, *Haemophilus influenzae* type B, pneumococcal disease, influenza, hepatitis A and human papillomavirus. The list of required vaccines for school entry varies by state, depending on logistical, political, and practical considerations.

This report utilizes data submitted in December 2021³ by all Allegheny County schools to summarize the immunization status of students for the 2021-22 school year for the required vaccines. The Bureau of Data, Reporting, and Disease Control at ACHD was responsible for collecting, cleaning, and analyzing the data.

³ Data updated as of April 27, 2022

STUDENT IMMUNIZATION COVERAGE IN ALLEGHENY COUNTY

Based on the reported data, 156,186 students were enrolled in 366 Allegheny County schools in December 2021. Of the students enrolled, a large majority (83.2%) attended public schools, with the fewest number of students (3.9%) enrolled in private/independent schools (Table 1).

Table 1. Allegheny County School Enrollment, December 2021

School Type	Number of Students Enrolled		Number of Schools	
	N	(%)	N	(%)
Charter	8,356	(5.4)	20	(5.5)
Parochial/Religious	11,793	(7.6)	54	(14.8)
Private/Independent	6,137	(3.9)	48	(13.1)
Public	129,900	(83.2)	244	(66.7)
Total	156,186	(100.0)	366	(100.0)

The overall percentage of students in Allegheny County with all immunizations required for school entry was 95.3% for the 2021-22 school year (Table 2).

Table 2. Allegheny County Immunization Status of All Students, School Year 2021-2022

Status	N	%
Total Enrollment	156,186	100.0%
Fully Immunized	148,811	95.3%
Medical Exemption	821	0.5%
Religious Exemption	2,433	1.6%
Moral/Philosophical Exemption	1,606	1.0%
Homeless Exemption	58	0.04%
Provisionally Enrolled	2,429	1.6%
Denied Admission	21	0.01%

Individual grades showed high percentages of fully immunized students, with only kindergarten (94.3%), 7th grade (92.0%), and 12th grade (90.5%) falling short of the *Healthy People 2020* goal of 95% coverage (Table 3). These grades most likely had lower coverage because they require

new or additional immunizations for entry. The percentage of students with complete immunizations (95.3%) was slightly lower than in the previous school year (Table 3). Overall coverage still exceeds 95%; however, there has been a downward trend in overall coverage since the 2013-14 school year. Year-to-year variation by grade has been minimal, apart from a drop in 12th grade coverage from 2016-17 (96.9%) to 2017-18 (92.9%) when the new requirement for a second dose of the MCV vaccine was introduced, and the recent drops in 7th and 12th grade coverage from 2019-20 to 2020-21 when many schools switched to virtual learning due to the COVID-19 pandemic.

Table 3. Percentage of Fully Immunized Students by School Year and Grade, Allegheny County, 2014-15 SY to 2021-22 SY

Grade	April 2015	April 2016	April 2017	December 2017	December 2018	December 2019	December 2020	December 2021
	%	%	%	%	%	%	%	%
K	94.3	94.9	94.9	96.4	95.8	95.8	94.2	94.3
1st	96.3	96.2	96.8	96.7	97.1	96.7	96.8	96.1
2nd	96.9	96.8	96.4	97.3	97.0	97.2	96.6	96.7
3rd	96.9	96.9	96.8	96.6	97.3	97.0	97.3	96.5
4th	97.1	97.2	97.0	97.1	96.9	96.9	96.9	97.0
5th	97.3	97.0	97.2	96.9	97.3	96.7	97.1	96.8
6th	97.4	97.2	97.3	97.3	97.2	97.1	96.7	96.8
7th	96.4	96.2	94.8	95.9	95.6	95.7	91.4	92.0
8th	96.7	96.7	96.4	96.5	96.6	96.4	96.2	94.3
9th	96.5	96.8	96.2	96.4	96.1	95.9	96.4	95.5
10th	97.3	96.6	96.2	96.0	96.5	96.6	96.2	96.2
11th	97.3	97.2	96.1	96.3	96.8	96.9	96.4	96.0
12th	97.2	97.2	96.9	92.9	93.3	93.4	89.6	90.5
Total	96.7	96.7	96.4	96.3	96.4	96.3	95.6	95.3

Allegheny County schools were classified as charter, parochial/religious, private/independent, or public. Public schools, which account for 66.7% of the schools and 83.2% of the total students in Allegheny County (Table 1), had a complete immunization coverage of 95.7 (Table 4). Charter schools also had high complete immunization coverage (95.2%). Both private/independent (91.7%) and parochial/religious schools (92.5%) fell short of meeting the *Healthy People 2020* goal of 95% coverage.

During the past several years, public schools and charter schools have consistently reached at least 95% complete immunization coverage (Table 3). Parochial/religious schools have not met the 95% goal since 2013 (data not shown), while private/independent schools have not met the 95% goal since 2016.

Table 4. Percentage of Fully Immunized Students by School Type, Allegheny County, 2014-15 SY to 2021-22 SY

School Type	15-Apr	16-Apr	17-Apr	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
Charter	97.9	98.0	95.6	96.7	97.0	96.4	95.2	95.2
Parochial/Religious	94.8	94.8	94.4	94.2	94.8	94.1	93.3	92.5
Private/Independent	92.9	95.1	94.6	94.2	92.2	93.0	94.1	91.7
Public	97.2	96.9	96.7	96.6	96.7	96.7	95.8	95.7

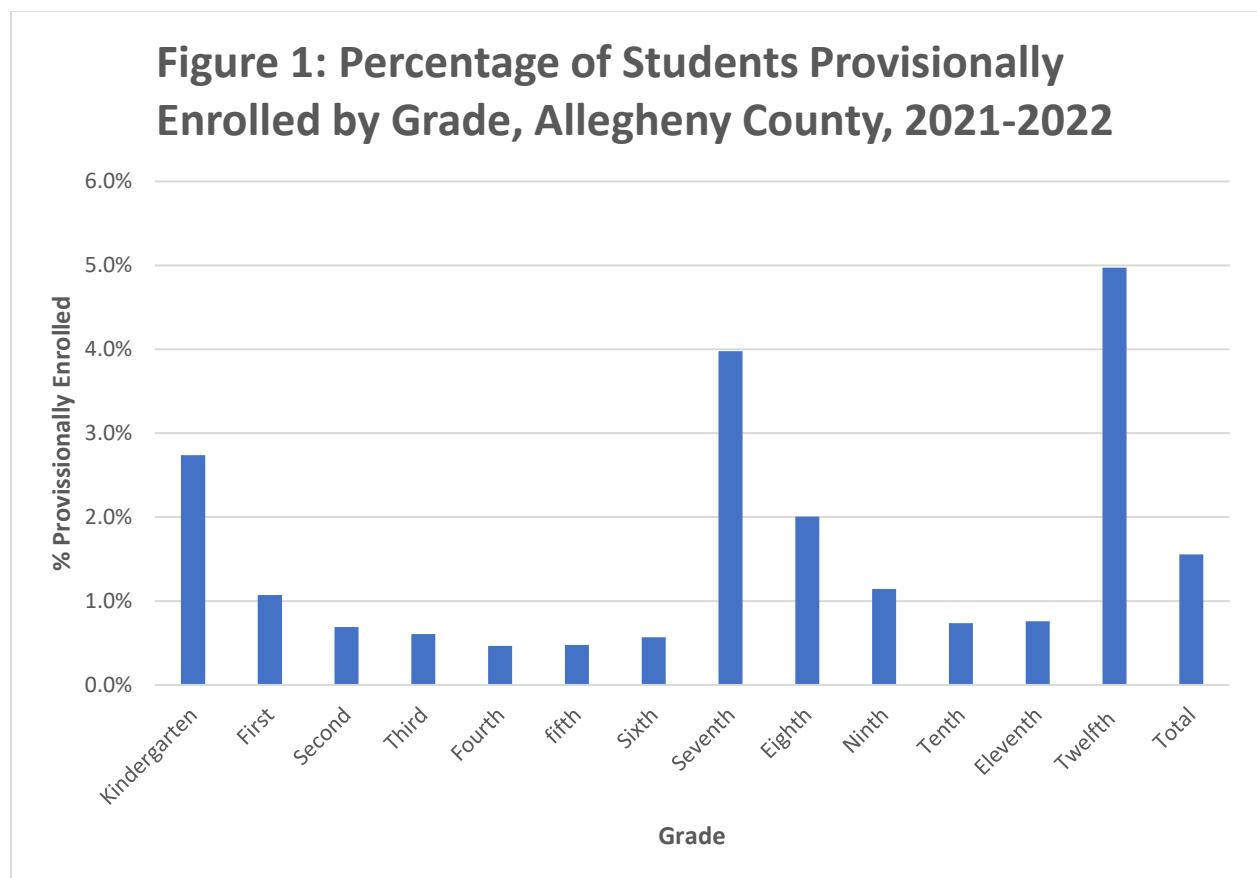
Overall, 65.0% of all Allegheny County schools had at least 95% coverage (Table 5). This is a decrease from the 2019-20 school year when 77.7% of schools had at least 95% coverage, and a small decrease from the 2020-21 school year when 67.8% of schools had at least 95% coverage.

Table 5. Percentage of Schools with >95% Coverage by School Type, Allegheny County, December 2021

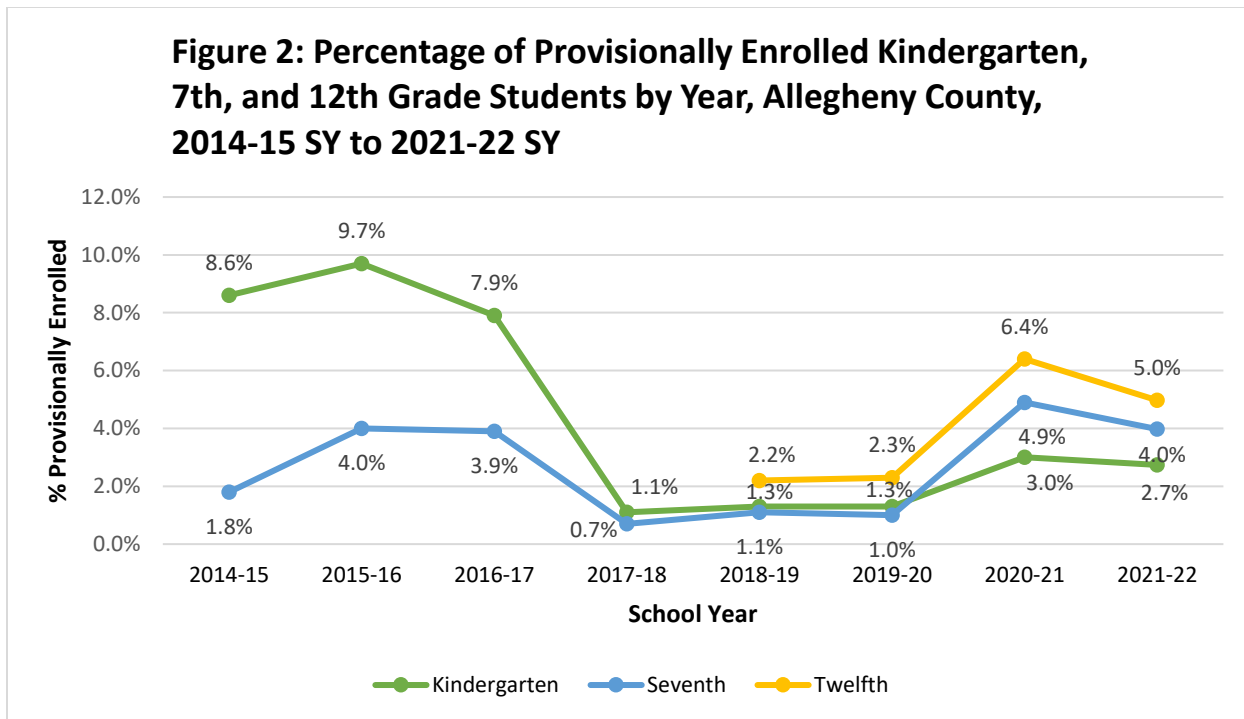
School Type	Number of Schools	Number of Schools that Met 95% Goal
	N	N (%)
Charter	20	11 (55.0)
Parochial/Religious	54	21 (38.9)
Private/Independent	48	24 (50.0)
Public	244	182 (74.6)
Total	366	238 (65.0)

PROVISIONAL ENROLLMENT IN ALLEGHENY COUNTY

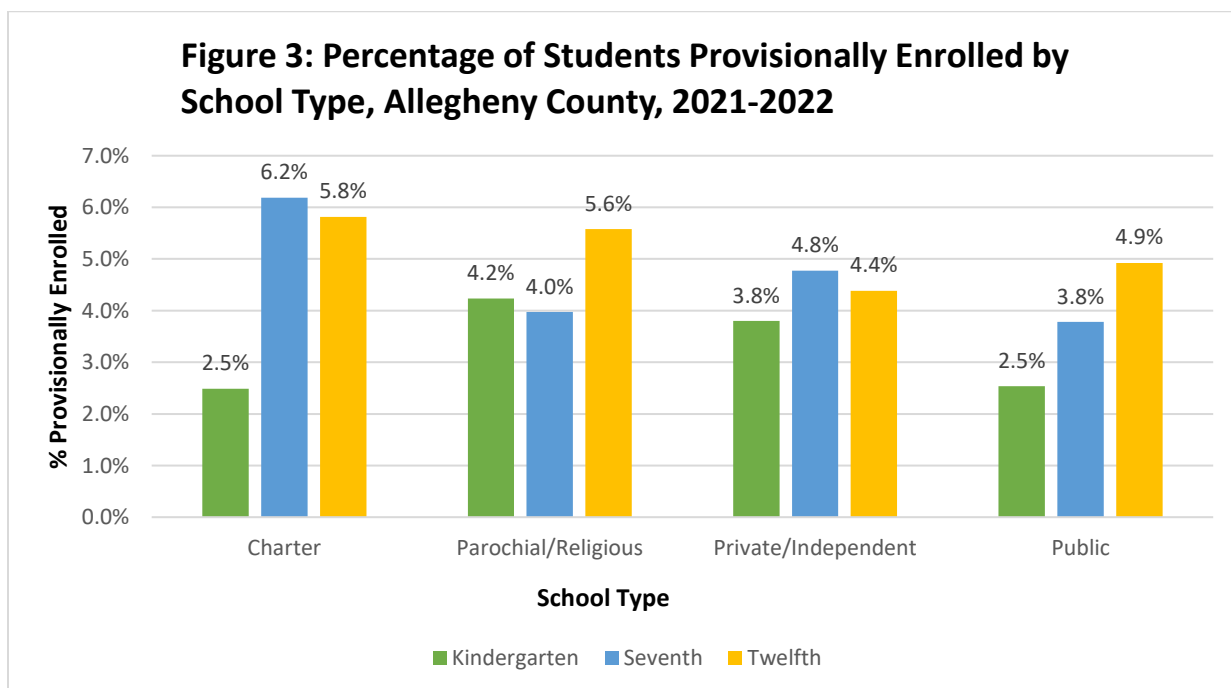
As of December 2021, 1.6% of students in Allegheny County schools were provisionally enrolled. Higher levels of provisional enrollment were seen in kindergarten, 7th, and 12th grades than others due to additional immunization requirements (Figure 1).



Provisional enrollments in Kindergarten, 7th grade, and 12th grade decreased this year compared to last year. A large drop in provisional enrollment occurred in 2017-18, most likely because the provisional period was changed (Figure 2). It now ends before the deadline for reporting immunization data. The increase in 2020-21 corresponded to the switch to remote learning in many districts.



As seen in Figure 3, charter and parochial/religious schools had the highest percentage of provisionally enrolled students in 12th grade. Charter and private/independent schools had the highest percentage of provisionally enrolled students in 7th grade.



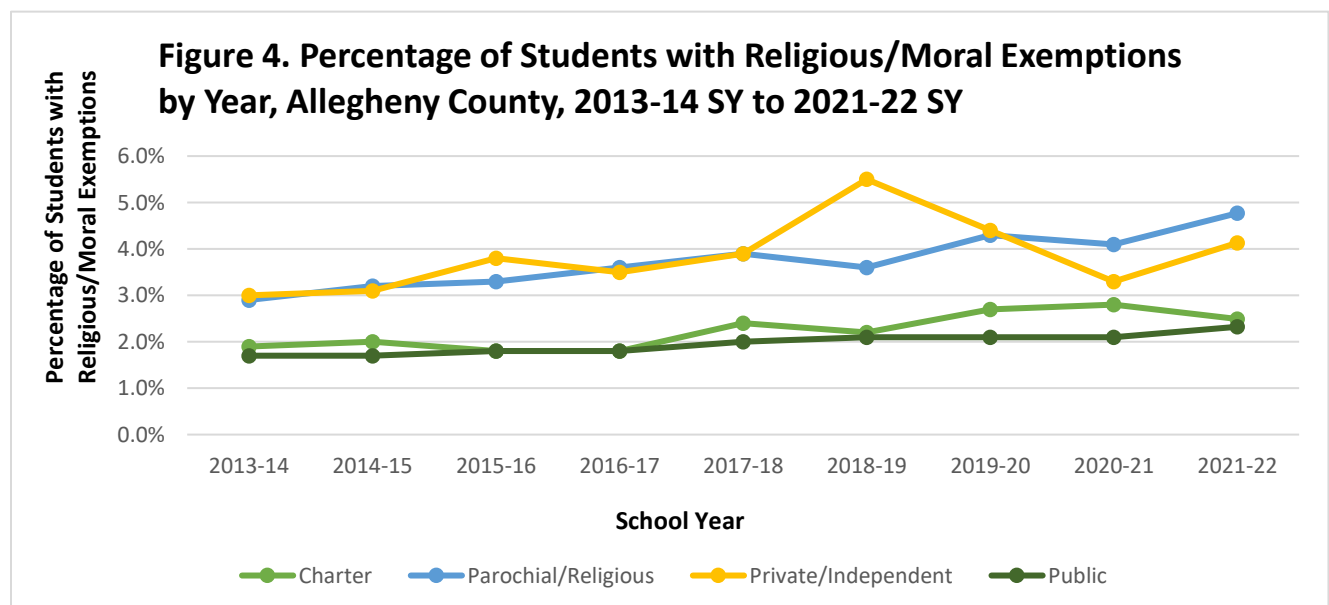
IMMUNIZATION EXEMPTIONS IN ALLEGHENY COUNTY

In Allegheny County, 3.1% of students submitted a medical, religious, or moral exemption from being fully immunized by December 2021 (Table 6). The percentage of students with moral/philosophical exemptions was unchanged from 2020-21 at 1.0%. Medical exemptions (0.5%), and religious exemptions (1.6%) were similar to 2020-21 when they were 0.6% and 1.4%, respectively. Public schools had the lowest percentage of total exemptions (2.9%), and parochial/religious schools had the highest (5.1%).

Table 6: Percentage of Students with Medical, Religious or Moral Exemptions by School Type, Allegheny County, December 2021

School Type	Number of Students Enrolled	Number of Medical Exemptions	Number of Religious Exemptions	Number of Moral Exemptions	Number of Total Exemptions
	N	N (%)	N (%)	N (%)	N (%)
Charter	8,356	25 (0.3)	136 (1.6)	72 (0.9)	233 (2.8)
Parochial/Religious	11,793	38 (0.3)	379 (3.2)	184 (1.6)	601 (5.1)
Private/Independent	6,137	52 (0.9)	153 (2.5)	99 (1.6)	304 (5.0)
Public	129,900	706 (0.5)	1764 (1.4)	1251 (1.0)	3721 (2.9)
Total	156,186	821 (0.5)	2432 (1.6)	1606 (1.0)	4859 (3.1)

Religious/moral exemptions combined increased this school year for private/independent and parochial/religious schools. There was a slight increase in these exemptions for public schools compared to last year (Figure 4).



IMMUNIZATION STATUS BY VACCINE

Kindergarteners in public and charter schools exceeded 95% coverage for all five vaccines, but coverage among private/independent was low for MMR (94.5%), and VZV (94.3%). Coverage was especially low among parochial/religious schools, which did not exceed 91.9% coverage for any vaccine (Table 7).

No school type achieved 95% coverage among 7th or 12th grade students. Public schools had the highest coverage among school types, with 93.9% of 7th grade students receiving the required dose of MCV4 and Tdap vaccines (Table 8), and 92.0% of 12th grade students receiving a second dose of MCV4 (Table 9). Private/independent schools had the lowest coverage among all vaccines required for entry into 7th and 12th grades.

Table 7. Percentage of Kindergarten Students Immunized by School Type and Vaccine, Allegheny County, December 2021

Vaccine	Charter	Parochial/Religious	Private/Independent	Public
MMR (2)	95.9	90.9	94.5	95.9
VZV (2)	95.6	90.3	94.3	95.8
HBV (3)	96.6	91.9	95.9	96.9
Polio (4)	95.3	91.1	94.5	95.9
DTaP (4+)	96.3	89.7	95.0	96.0

Table 8. Percentage of 7th Grade Students Immunized by School Type and Vaccine, Allegheny County, December 2021

Vaccine	Charter	Parochial/Religious	Private/Independent	Public
MCV4 (1 dose)	90.9	92.3	80.5	93.9
Tdap (1 dose)	90.8	93.0	81.5	93.9

Table 9. Percentage of 12th Grade Students Immunized by School Type and Vaccine, Allegheny County, December 2021

Vaccine	Charter	Parochial/Religious	Private/Independent	Public
MCV4 (2 doses)	90.6	91.2	87.7	92.0

SUMMARY

In Allegheny County, overall immunization coverage for the required school vaccinations was 95.3% for the 2021-2022 school year, which exceeds the *Healthy People 2020* goal of 95% coverage; however, there has been a slow downward trend from the 2011-12 school year to the present. The slight decrease in overall coverage from 2019-2020 to 2021-2022 was likely due to the impact of the COVID-19 pandemic, which led to a decrease in well-child visits and preventive healthcare, including immunizations.^{4,5}

Overall, 65.8% of all schools in Allegheny County had at least 95% of their students fully immunized. Public schools had the highest percentage of schools (74.8%) with 95% coverage, followed by charter schools (55.0% of schools), private/independent schools (51.1% of schools), and parochial/religious schools (40.0% of schools).

The percentage of students with exemptions continues to be low in Allegheny County. Medical exemptions were submitted for only 0.5% of students and religious/moral exemptions increased slightly from the previous school year to 2.6%. Of these, 1.6% were religious exemptions and 1.0% were moral/philosophical exemptions. Private/independent and parochial/religious schools continue to have the highest percentages of religious and moral exemptions.

The high percentages of provisional enrollment for students in kindergarten, 7th, and 12th grade point to a need to increase immunization efforts before the school year starts. Schools should provide additional information to parents during the summer about immunization requirements for students in these grades. Providers may need to hold additional vaccination clinics before the start of the school year. Overall, provisional enrollments were lower than in most previous school years, but no school type reached the goal of zero provisional enrollments by the December deadline for submitting data. Decreasing the number of students provisionally enrolled when they start school is necessary to protect the health of these students, as well as students who are immunocompromised or otherwise susceptible to vaccine-preventable disease.

Allegheny County's high immunization coverage can be attributed to the hard work and dedication of school nurses, parents, clinicians, and public health officials who help ensure students are fully immunized.

⁴ Patel B, Murthy , Zell E, et al. Impact of the COVID-19 Pandemic on Administration of Selected Routine Childhood and Adolescent Vaccinations — 10 U.S. Jurisdictions, March–September 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:840–845. DOI: [http://dx.doi.org/10.15585/mmwr.mm7023a2external icon](http://dx.doi.org/10.15585/mmwr.mm7023a2external%20icon).

⁵ Schweiberger K, Patel SY, Mehrotra A, Ray KN. Trends in Pediatric Primary Care Visits During the Coronavirus Disease of 2019 Pandemic. *Academic Pediatrics* 2021. Published May 10, 2021 DOI:<https://doi.org/10.1016/j.acap.2021.04.031>