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# DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH  
*Helping people. It's who we are and what we do.*



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**DATE:** November 22, 2022

**TO:** Jon Pennell, DVM, Chairperson  
State Board of Health

**FROM:** Lisa Sherych, Secretary  
State Board of Health

**RE:** Follow up on question on Nevada State Immunization Program (NSIP) Childhood Vaccination Agenda Item at the September 2, 2022 Board of Health Meeting

In follow up to a question posed at the September 2, 2022, Board of Health meeting, the Nevada State Immunization Program, Childhood Vaccination agenda item, a breakout of kindergarten vaccine rates further subdivided *by vaccine type* is provided in Table 1, below, using a refined methodology.

<b>Rate of Kindergarten Students in Nevada with Religious Exemptions for School Required Vaccines by Vaccine Type, School Type, and School Year</b>					
		<b>2019-2020</b>	<b>2020-2021</b>	<b>2021-2022</b>	<b>% Change from 2019-2022</b>
<b>Nevada</b>	<b>Public</b>	<b>3.4%</b>	<b>3.5%</b>	<b>4.0%</b>	<b>17.9%</b>
	<b>Private</b>	<b>5.7%</b>	<b>5.3%</b>	<b>6.9%</b>	<b>21.0%</b>
DTaP	Public	3.2%	3.0%	3.7%	14.5%
	Private	5.6%	5.0%	7.1%	27.3%
Hep A	Public	3.2%	3.2%	3.7%	14.0%
	Private	5.5%	4.9%	6.9%	25.5%
Hep B	Public	2.9%	2.7%	3.5%	18.9%
	Private	5.5%	5.0%	7.0%	27.8%
MMR	Public	2.7%	2.4%	3.2%	19.5%
	Private	5.6%	5.0%	6.9%	22.2%
Poliovirus (IPV)	Public	3.2%	3.0%	3.7%	17.9%
	Private	5.5%	5.1%	7.0%	26.5%
Varicella	Public	3.2%	3.0%	3.7%	16.1%
	Private	5.7%	5.0%	7.0%	23.9%

Source: Nevada Annual Immunization Reporting Survey, DBPH

Note: Public rates include Nevada State Public Charter Schools

*Applied method calculates the number of individual kindergarten students with any religious exemption (numerator) and then divides it by the number of students enrolled in kindergarten (denominator).*

Starting in 2019, the annual immunization reporting survey changed from a sample-based survey to a census-based survey to represent Nevada's schools and immunization information more accurately. By statute, each public and private school and childcare facility shall report the exact number of pupils who have completed the immunizations required for enrollment before December 31<sup>st</sup> of each year. The Nevada Division of Public and Behavioral Health (DPBH) collects this information through REDCap surveys. Data is then submitted to the Centers for Disease Control and Prevention for further analysis and publication on [SchoolVaxView](#). This school census is what is used to examine vaccine exemption rates in Nevada schools.

Data presented at the Board of Health Meeting on September 2, 2022, was based on an analysis adding up the number of religious exemptions for each individual school-required vaccine and dividing it by the number of enrolled students surveyed:

$$\frac{(\text{DTaP} + \text{HepA} + \text{HepB} + \text{MMR} + \text{IPV} + \text{VAR religious exemptions})}{(\text{Students Enrolled})}$$

For the revised analysis presented in Table 1, school census data for 2019-2020, 2020-2021, and 2021-2022 school years were analyzed to determine religious exemption rates for school-required vaccines among Nevada kindergarteners. This methodology was used to examine the number of students with any religious exemption and divided that by the number of enrolled students surveyed, shown below:

$$\frac{(\text{Students with Religious Exemptions})}{(\text{Students Enrolled})}$$

Previous data methodology noting students with religious exemptions were 22% in public schools were drawn from a different methodology that tends to over sample the exemptions per population. While the number of total religious exemptions rose from the prior school year using either methodology, the percentage of kindergarten students with religious exemptions remains below 5% in the revised methodology. In 2020-2021, kindergarten students with religious exemptions were 3.6%; this number climbed to 4.2% in 2021-2022, with a percent change of 17%. There was an overall percent change of 18.5% between the 2019-2020 and 2021-2022 school year.