

2018

Immunization Coverage Report



**Utah Department of Health
Division of Disease Control and
Prevention
Immunization Program
November 2018**

Immunization Coverage Report

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Message from the Utah Immunization Program

The *Immunization Coverage Report, State of Utah: 2018*, supports the mission and goal of state and local immunization programs . . . to improve the health of Utah's citizens through vaccination to reduce illness, disability, and death from vaccine-preventable infections.

This annual *Immunization Coverage Report* provides an overview of immunization information about Utah residents, organized by immunization coverage status for Utah children, adolescents, and adults. The report presents data obtained from four primary sources: the National Immunization Survey (NIS), the Behavioral Risk Factor Surveillance System (BRFSS), the Utah Statewide Immunization Information System (USIIS), and the APPX web application used for tracking immunization coverage rates from Utah schools, licensed child care facilities, and long-term care facilities. Descriptions of these sources and the methodologies used in data reporting are described throughout the report. Because of the differences in the collection methodologies of these data sources, care should be taken before considering comparisons.

This report can be a resource for local immunization programs in evaluating coverage areas, identifying gaps in services, developing immunization intervention strategies, and in considering further investigations.

An ongoing focus of immunization coverage is the infant and early childhood population. According to the 2017 National Immunization Survey (NIS), Utah ranked 41 in the nation for the number of two-year-olds who were fully immunized. The NIS reports an estimate of the number of children 19-35 months of age who have completed the recommended childhood immunization series 4:3:1:4:3:1:4 (4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 Hepatitis B, 1 Varicella, and 4 Pneumococcal vaccines) by 24 months of age.

Despite improvements in coverage rates in recent years, there is still work to be done to achieve the *Healthy People 2020* objective to reduce, eliminate, or maintain elimination of cases of vaccine-preventable diseases. The focus of Utah's Immunization Program continues to be those areas where immunization efforts can be concentrated to affect significant improvements.

Ongoing efforts to increase childhood immunization levels include a variety of interventions, including ensuring that healthcare providers have current information on immunization best practices, implementing a coordination project with the Intermountain Pediatric Society, and enrolling diverse providers in the Utah Statewide Immunization Information System (USIIS). These combined efforts will **help ensure** Utah's children are protected from vaccine-preventable diseases now and into the future.

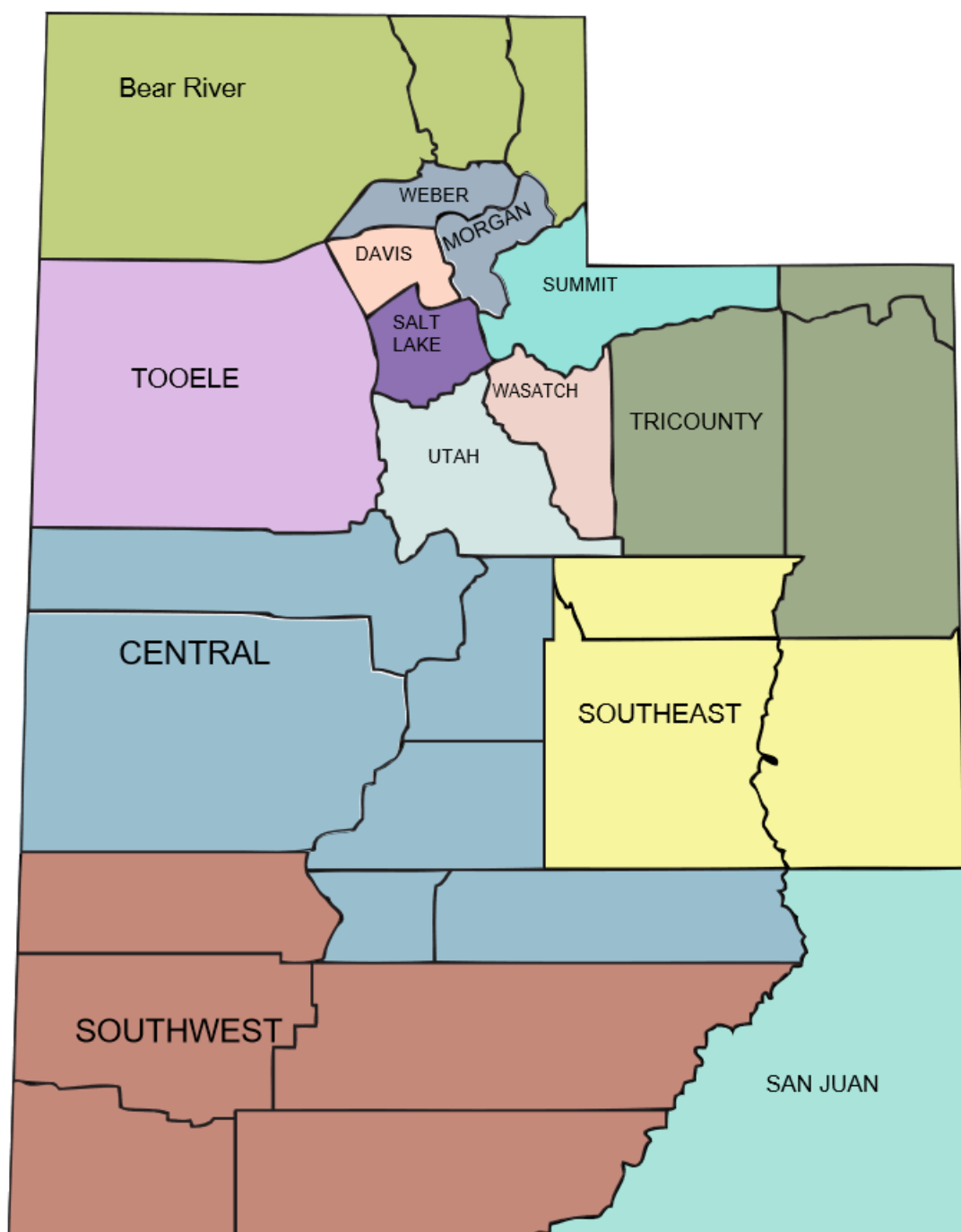
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Utah's 29 counties are divided between 13 local health districts (LHDs) which are used in this report as the geographic boundaries of reporting service areas (see map of Utah below). Statewide information is also presented as a comparison. Information within the Immunization Coverage Report is divided into two main categories with detailed information for each: 1) United States and state of Utah, and 2) Local Service Areas. Detailed descriptions of data are included within each of these categories throughout this report.

Although limited comments may follow a specific graph or chart, more detailed notes may be found in the *References Section* that begins on page 143. Explanatory footnotes are provided on some pages and are intended to supply information pertaining to data sources and limitations on data interpretation. Where applicable, county-specific information is presented.



Early Childhood Immunization

The Advisory Committee on Immunization Practices (ACIP) and the Centers for Disease Control and Prevention (CDC), establish standards of comparison for immunization status. Up-to-date (UTD) at age two is the percentage of children two years of age (24 months) who have received all doses of recommended vaccines by the recommended age. This standard is used across the United States by state immunization programs and provider sites to evaluate their effectiveness in protecting patients from vaccine-preventable diseases.

Child and Adult Immunization

Exposure to groups of people of any age increases the risks for contracting and transmitting infectious diseases. More than two-thirds of children younger than six years and nearly all children older than six years spend significant time in child care and school settings outside the home. The Utah Immunization Rule for Students (R396-100) became effective in 1975 to implement consistent requirements to protect children attending school.

School Entry (Kindergarten & 7th Grade) & Two Doses of MMR (K–12)

Required kindergarten entry immunizations include: DTaP, Polio, MMR, Hepatitis B, Hepatitis A, and Varicella vaccines. Required 7th grade entry immunizations include: Hepatitis B, Varicella, Tdap, and meningococcal.

Influenza and Pneumococcal

The incidence of childhood vaccine-preventable diseases has declined dramatically, but similar successes among adults have not been achieved. Adults still suffer the vast majority of certain vaccine-preventable diseases in the U.S.

The 2017 Behavioral Risk Factor Surveillance System (BRFSS) survey results on influenza and pneumococcal immunization data are included. These data, by means of a number of different analyses, provide a summary of coverage of influenza and pneumococcal vaccinations for adults 18 years of age and older.

Appendix B includes 2017 immunization information for residents of long-term care and assisted living facilities. This data is collected by the Utah Department of Health Immunization Program through the APPX Web Application.

National Immunization Survey (NIS)

The NIS is sponsored by the National Center for Immunizations and Respiratory Diseases (NCIRD) and conducted jointly by NCIRD and the National Center for Health Statistics (NCHS), CDC. The NIS is a random-digit-dialing telephone survey of parents followed by a mailed survey to children's immunization providers, contact information supplied by the parents. The survey requests immunization information from the providers. The results are tabulated and presented by the CDC. The average sample size per cohort is 400 individuals. For example, in 2013, information for 19-35 month old children was collected for 372 children in Utah; the healthcare providers of 249 of those 372 children had data to verify immunization records.

Behavioral Risk Factor Surveillance System (BRFSS)

The Utah BRFSS is an ongoing information collection effort by the Utah Department of Health in conjunction with the CDC to assess the prevalence of and trends in health-related behaviors in the non-institutionalized Utah adult population aged 18 years and older. The BRFSS survey is conducted by Utah Department of Health (UDOH) employees who contact Utahns by landline and cell phones and use a script and questionnaire to conduct interviews and collect responses. CDC then aggregates annual results. In 2017, 4,199 interviews were conducted by land line phones and 8,693 interviews were conducted by cell phones. The response rate (complete and partially completed interviews divided by completed, partially completed, and refused/break-off interviews) was 56.4%.

Utah Statewide Immunization Information System (USIIS)

Established in 1998, USIIS collects, consolidates, and manages immunization records for Utah residents of all ages. The primary sources of USIIS data are healthcare providers, including public clinics, private clinics and practices, hospitals, and pharmacies. Additionally, USIIS obtains birth certificate data from the Office of Vital Records and Statistics. Participation in USIIS is voluntary; not all providers of immunizations participate. However all Vaccines for Children (VFC) providers are required to participate. See page 140 for more details about the VFC program.

For the 2018 Immunization Coverage Report, USIIS person data were grouped into 13 local health district service areas by their most up-to-date ZIP code and county information. Coverage results reflect 2018 data submitted to USIIS as of October 2018. Child coverage results include approximately 87% of Utah children—persons 19 years of age and younger with at least two immunizations. Adult coverage results include approximately 70% of Utah adults—persons age 19 and older with at least one immunization.

APPX Web Application

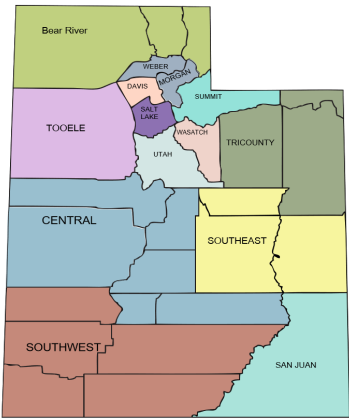
The APPX Immunization component is a web application used for the purpose of tracking immunization coverage rates for Utah schools, Head Start programs, licensed daycare facilities, and long-term care facilities. The Utah Department of Health Immunization program staff access the application to track data and run reports required by state rules. Users at schools, Head Start programs, daycare facilities, and long term-facilities access the web application to enter immunization data for their facilities.

Count of Enrolled USIIS Provider Facilities, Utah, 2018⁵	Total: 2,594
Charter Schools	122
Daycare Facilities	233
Early Childhood Programs	37
Federally Qualified Health Center (FQHC)/ Rural Health Center(RHC)/Community Health Center (CHC)	57
Head Start Centers	30
Hospitals	54
Indian Health Services	18
Local Health Departments	46
Long Term Care/Nursing Home	92
Other Public Providers	58
Pharmacies	479
Private Providers	662
Private Schools	54
Public Schools	607
School Districts	43
Vital Records	1
Women, Infants, and Children (WIC) Program	1

Acronyms and Abbreviations

AFIX—Assessment, Feedback, Incentive, Exchange Program
BR—Bear River
BRFSS—Behavioral Risk Factor Surveillance System
CDC—Centers for Disease Control and Prevention
CHC—Community Health Center
DTaP—Diphtheria, Tetanus Toxoids, and Acellular Pertussis
FS—Full Series
FQHC—Federally Qualified Health Center
HIB—Haemophilus influenzae Type B
HHS—Health and Human Services
HPV—Human Papillomavirus
LHD—Local Health District
MenACWY—Meningococcal Conjugate Vaccine
MMR—Measles, Mumps, Rubella
NIS—National Immunization Survey
PCV—Pneumococcal Conjugate Vaccine
PPSV—Pneumococcal Polysaccharide Vaccine
PS—Primary Series
RHC—Rural Health Center
SE—Southeast
SJ—San Juan
SW—Southwest
Tdap—Tetanus, Diphtheria, Pertussis
Td—Tetanus and Diphtheria
TriCo—TriCounty
UIP—Utah Immunization Program
USIIS—Utah Statewide Immunization Information System
UTD—Up to Date
VFC—Vaccines for Children Program
WIC—Women, Infant, and Children (WIC) Program
W-M—Weber-Morgan

Estimated Vaccination Coverage[^] Among Children Aged 19-35 Months

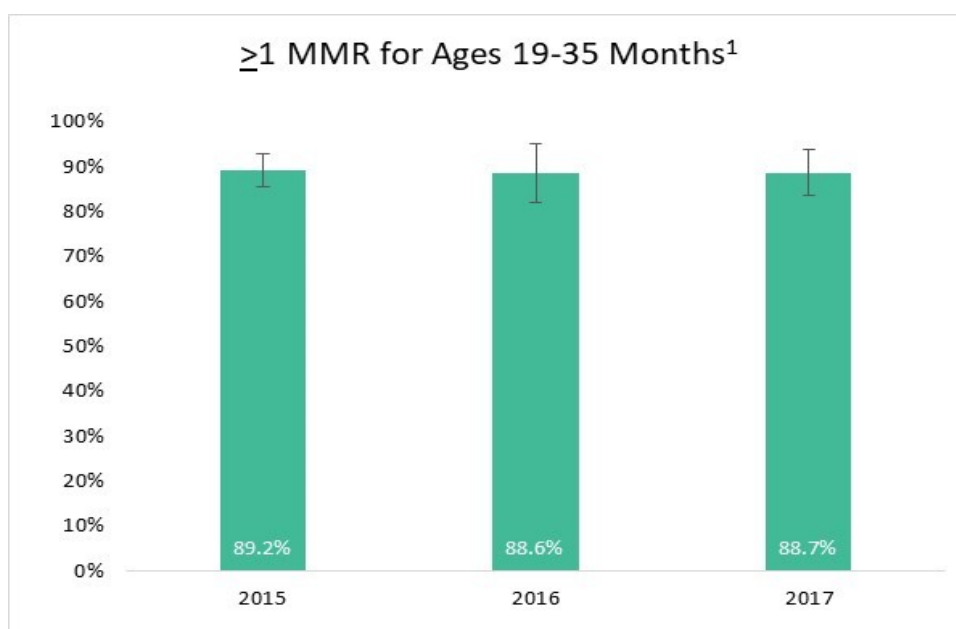
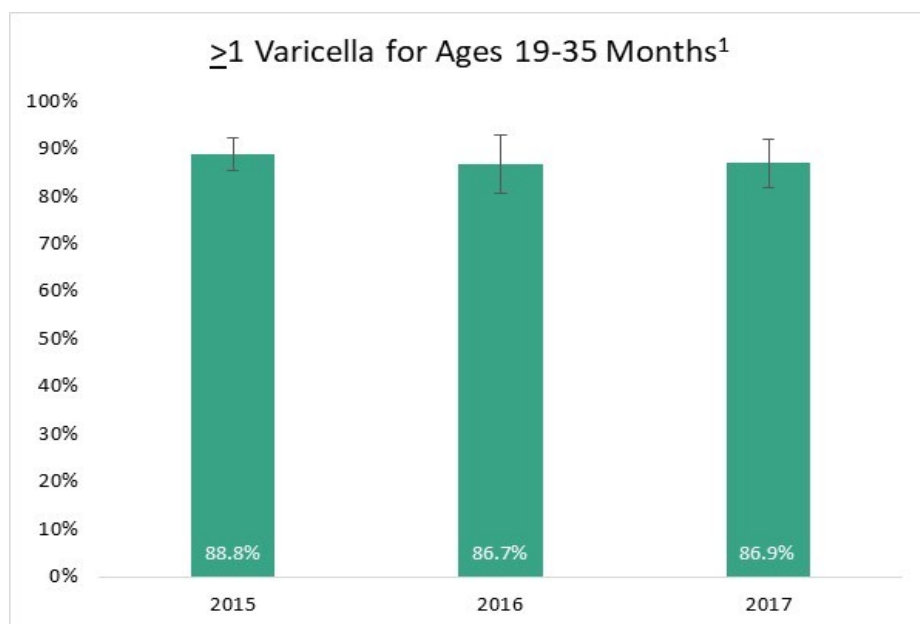
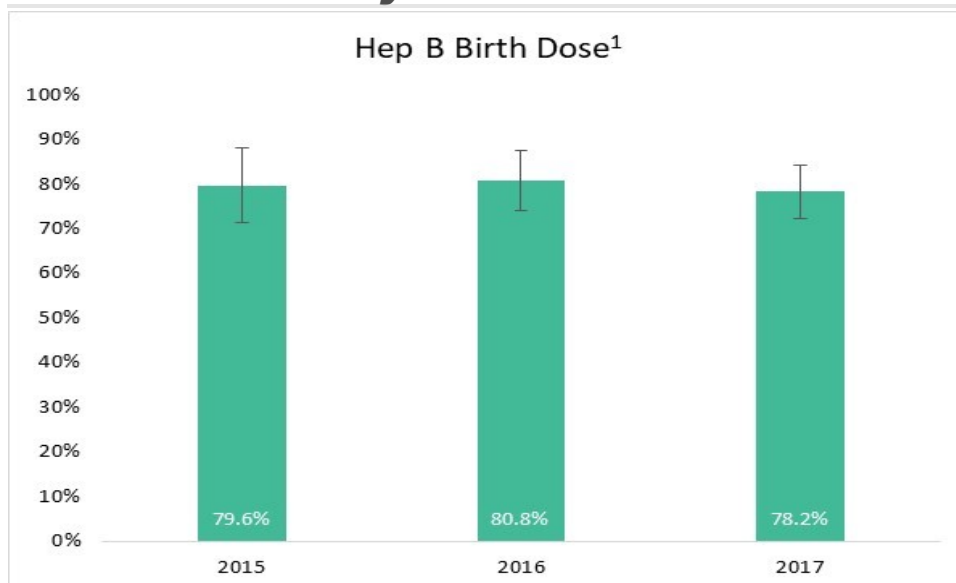
	Utah		U.S.		National Rank-2017 (Utah)
	2016	2017	2016	2017	
≥3 DTaP	92.8±4.3	90.8±4.0	93.7±0.8	94.0±0.7	46
≥4 DTaP	79.7±6.5	80.6±5.8	83.4±1.3	83.2±1.2	41
≥3 Polio	91.8±4.4	90.3±4.1	91.9±1.0	92.7±0.8	46
≥1 MMR	88.6±5.5	88.7±4.4	91.1±1.0	91.5±0.9	45
≥3 Hib	90.0±4.8	89.1±4.4	91.6±0.9	91.8±0.9	44
Hib-Primary Series (PS)	90.3±4.8	91.0±4.0	92.8±0.9	92.8±0.8	41
Hib-Full Series (FS)	78.2±6.5	79.3±5.8	81.8±1.3	80.7±1.3	38
≥3 Hep B	89.8±4.7	90.5±4.0	90.5±1.1	91.4±0.9	33
Hep B Birth dose (0-3 days)	80.8±5.8	78.2±6.1	71.1±1.6	73.6±1.6	16
≥1 Varicella	86.7±5.7	86.9±4.7	90.6±1.0	91.0±0.9	46
≥3 PCV	91.3±4.6	90.1±4.1	91.8±1.0	91.9±1.0	40
≥4 PCV	82.5±6.1	81.1±5.8	81.8±1.3	82.4±1.3	33
≥2 Hep A	64.5±7.1	59.6±7.2	60.6±1.6	59.7±1.6	27
Rotavirus	78.5±6.1	77.0±6.2	74.1±1.5	73.2±1.6	17
4:3:1 [§] (Combined 3-vaccine series)	79.3±6.5	79.5±5.9	81.9±1.3	81.7±1.2	35
4:3:1:3 ^{*IIIIII} (combined 4-vaccine series)	75.4±6.7	73.7±6.4	76.8±1.4	75.8±1.4	36
4:3:1:3*:3 [€] (Combined 5--vaccine series)	74.2±6.7	71.4±6.6	74.7±1.4	74.2±1.4	43
4:3:1:3*:3:1 ^ζ (combined 6-vaccine series)	73.6±6.7	70.2±6.7	73.8±1.5	732.2±1.4	46
4:3:1:3:3:1:4 ^{€€€} (Combined 7-vaccine series)	72.2±6.8	67.9±6.9	70.7±1.5	70.4±1.5	41

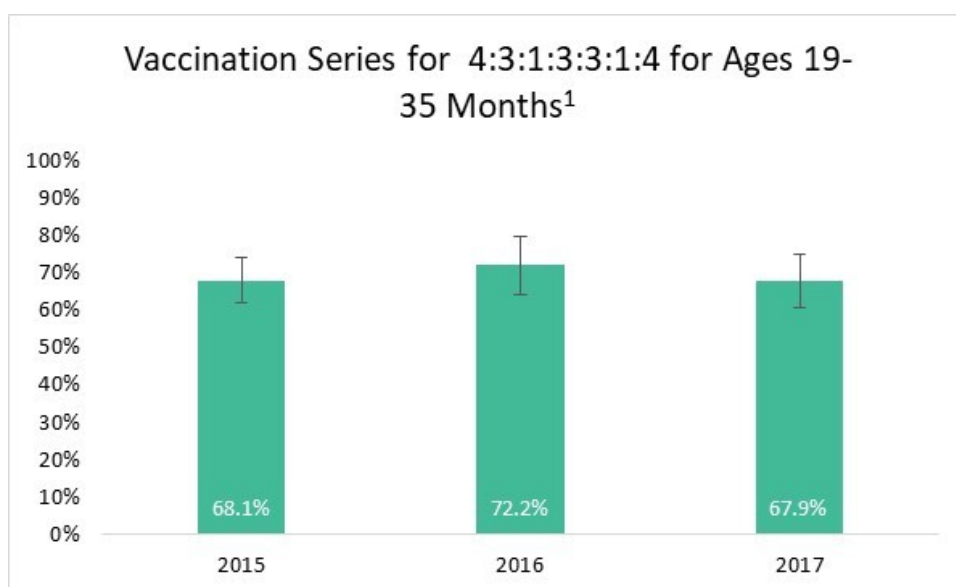
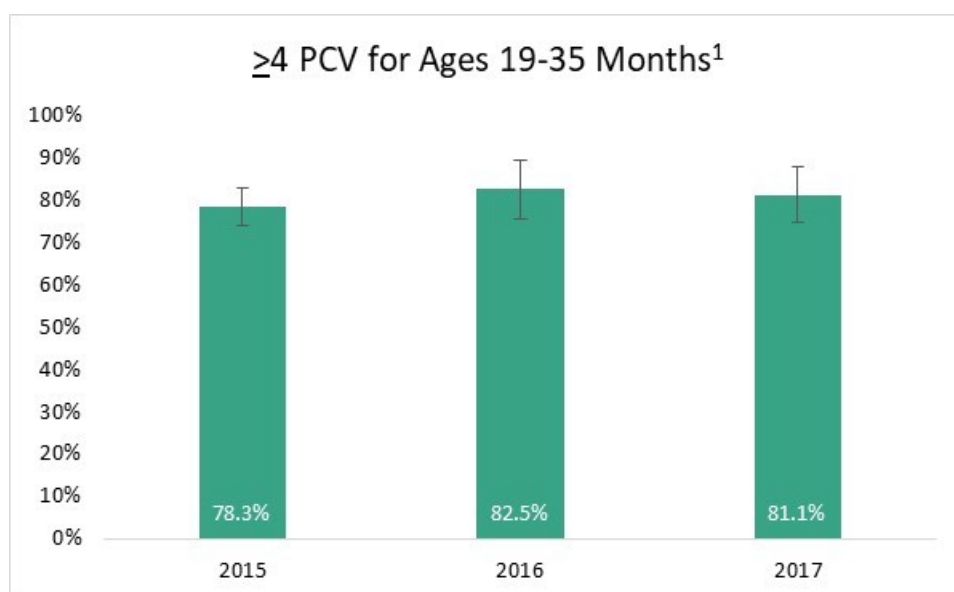
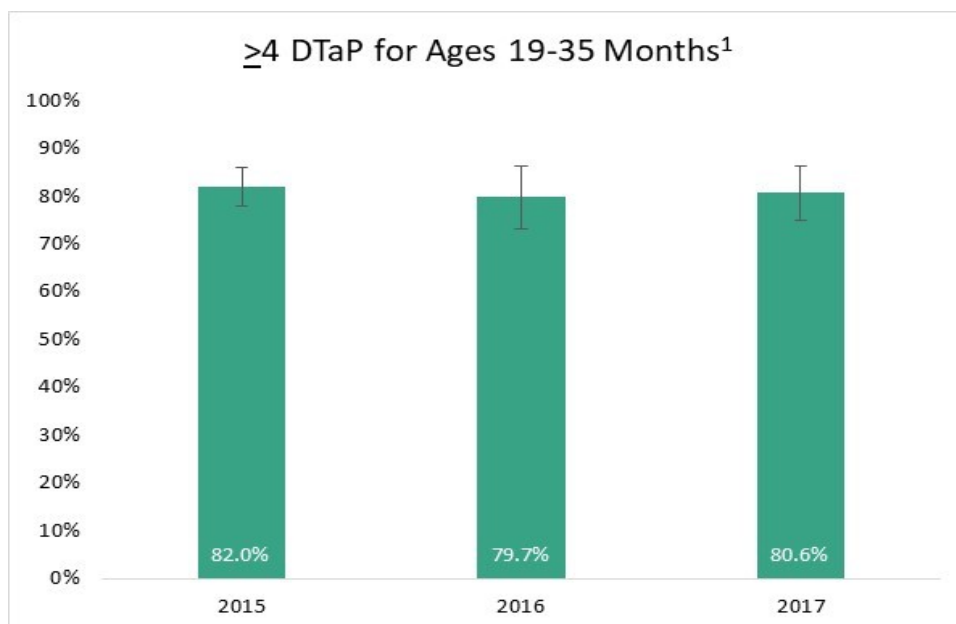
Source: 2016-2017 NIS Among Children 19-35 Months of Age, CDC. [§]4:3:1 = 4+DTaP, 3+Polio, 1+MMR. ^{IIIIII}4:3:1:3* = 4+DTaP, 3+Polio, 1+MMR, HIB full series. [€]4:3:1:3*:3 = 4+DTaP, 3+Polio, 1+MMR, full HIB series, 3+HepB. ^ζ4:3:1:3*:3:1 = 4+DTaP, 3+Polio, 1+MMR, full HIB series, 3+HepB, 1+Varicella. ^{€€€}4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV. [^]Estimate presented as point estimate(%) ± 95% confidence interval.

Estimated Vaccination Coverage[^] Among Children Aged 19-35 Months^{1,6}

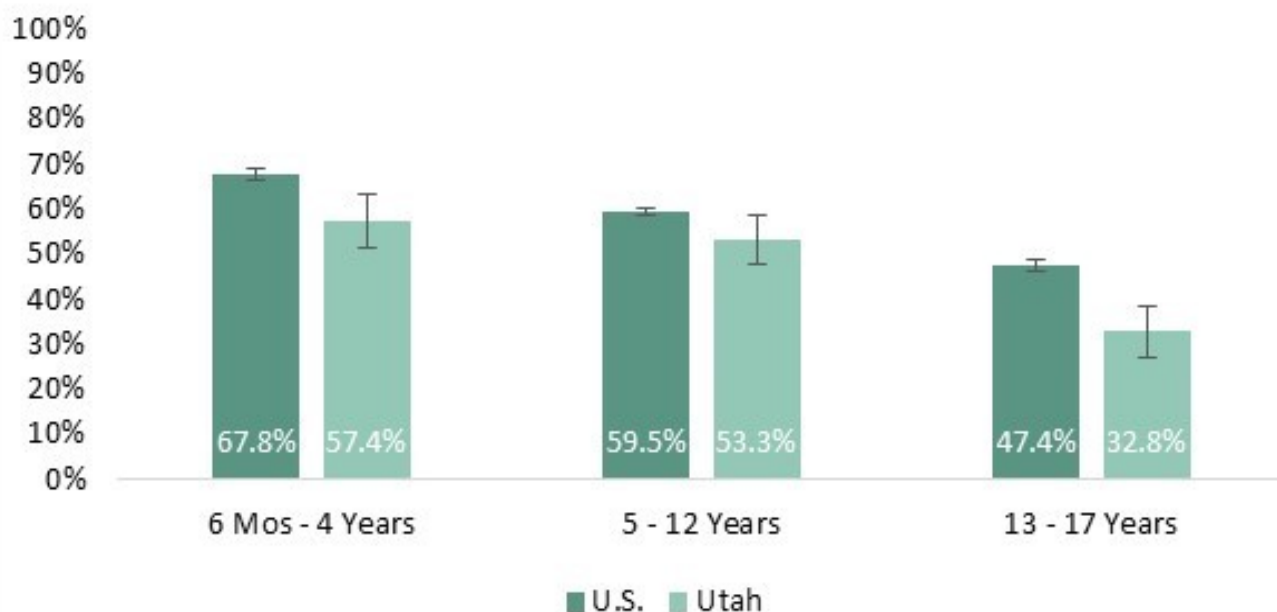
Vaccine Type	Utah, NIS ¹ 2017	Utah, USIIS ⁶ 2017
≥3 DTaP	90.8±4.0	91.0%
≥4 DTaP	80.6±5.8	77.0%
≥3 Polio	90.3±4.1	89.0%
≥1 MMR	88.7±4.4	87.4%
≥3 Hib	89.1±4.4	88.6%
≥3 Hep B	90.5±4.0	87.8%
Hep B Birth dose	78.2±6.1	83.3%
≥1 Varicella	86.9±4.7	86.9%
≥3 PCV	90.1±4.1	89.8%
≥4 PCV	81.1±5.8	76.8%
≥2 Hep A	59.6±7.2	66.4%
Rotavirus	77.0±6.2	91.5%
4:3:1 [§] (Combined 3-vaccine series)	79.5±5.9	75.1%
4:3:1:3* (Combined 4-vaccine series)	73.7±6.4	74.7%
4:3:1:3*:3 [€] (Combined 5--vaccine series)	71.4±6.6	73.9%
4:3:1:3*:3:1 [§] (Combined 6-vaccine series)	70.2±6.7	72.5%
4:3:1:3:3:1:4 ^{€€€} (Combined 7-vaccine series)	67.9±6.9	69.6%

[§]4:3:1 = 4+DTaP, 3+Polio, 1+MMR. ^{||||}4:3:1:3* = 4+DTaP, 3+Polio, 1+MMR, Hib full series. [€]4:3:1:3*:3 = 4+DTaP, 3+Polio, 1+MMR, full Hib series, 3+HepB. [§]4:3:1:3*:3:1 = 4+DTaP, 3+Polio, 1+MMR, full Hib series, 3+HepB, 1+Varicella. ^{€€€}4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV. [^]NIS Estimate presented as point estimate(%) ± 95% confidence interval.

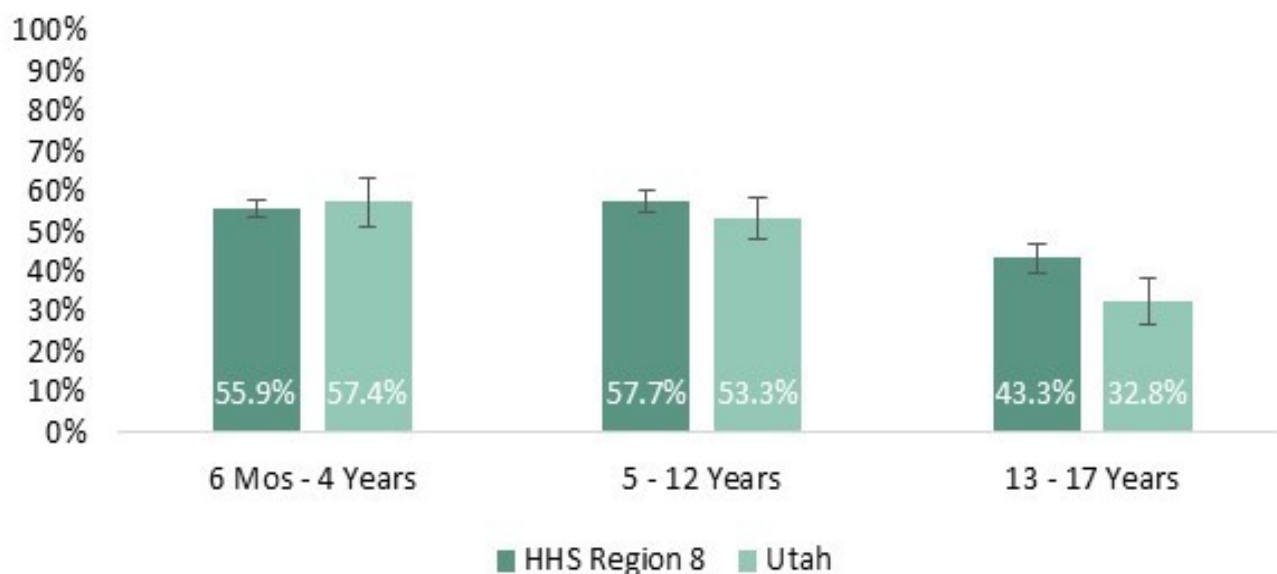




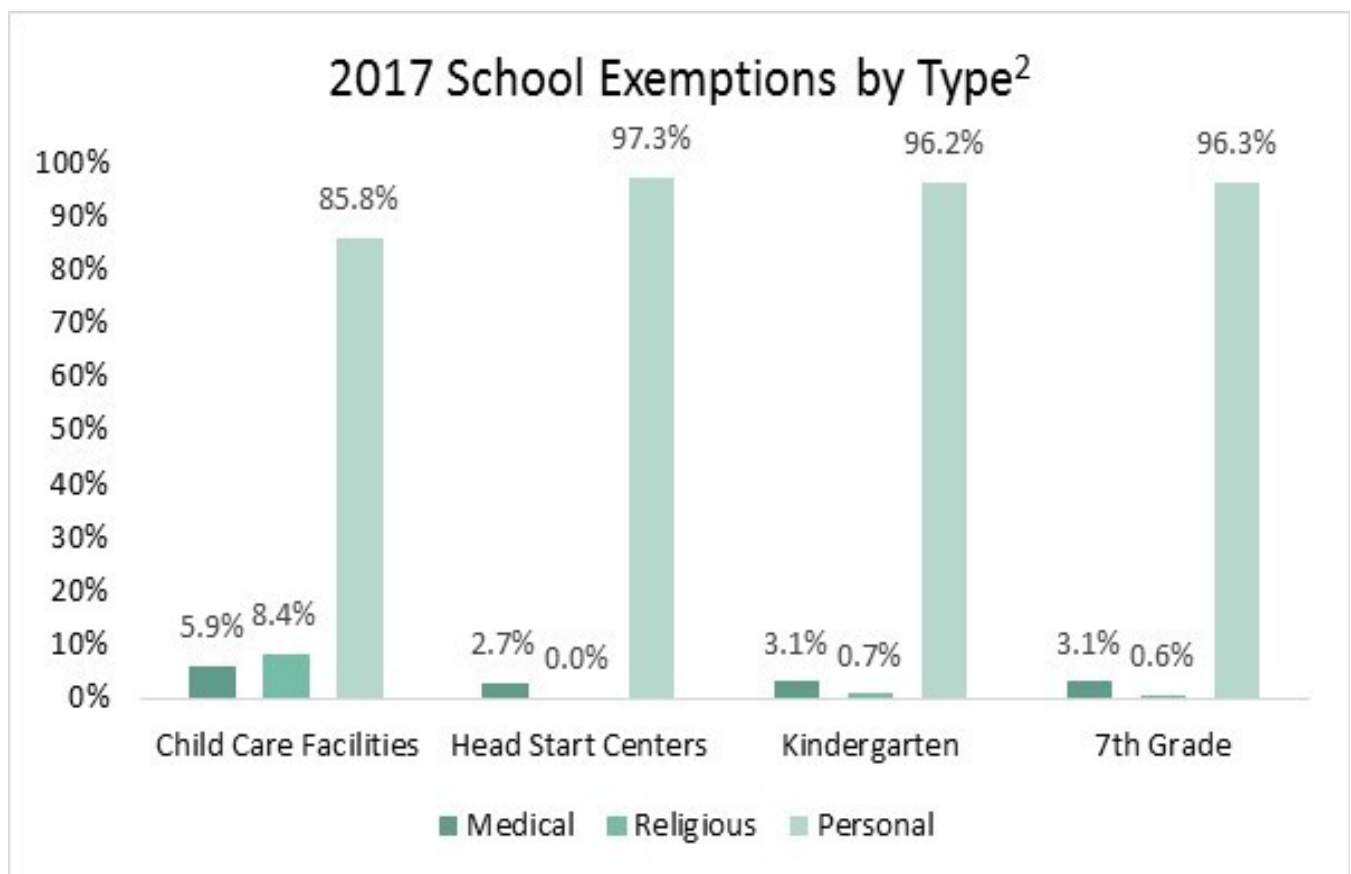
2017-2018 Season Childhood Influenza Vaccination by Age, U.S. and Utah



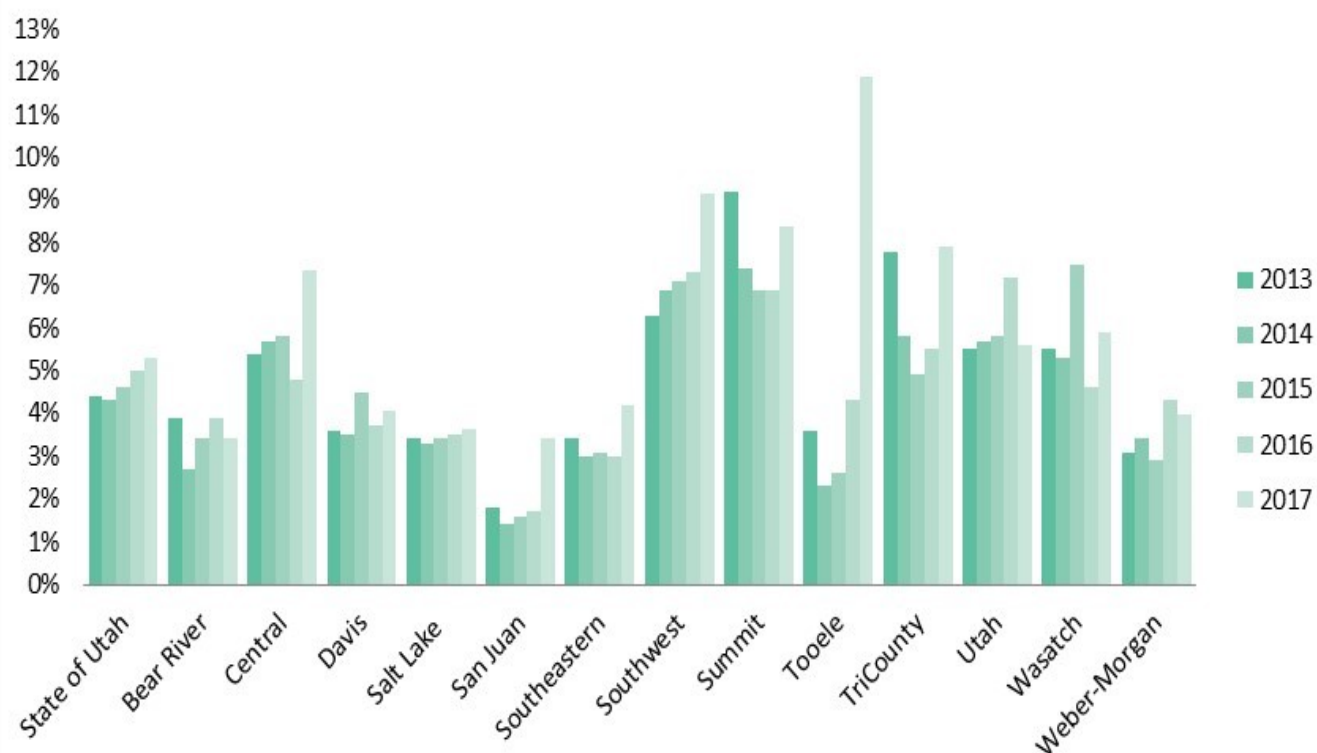
2017-2018 Season Childhood Influenza Vaccination by Age, HHS Region 8* and Utah



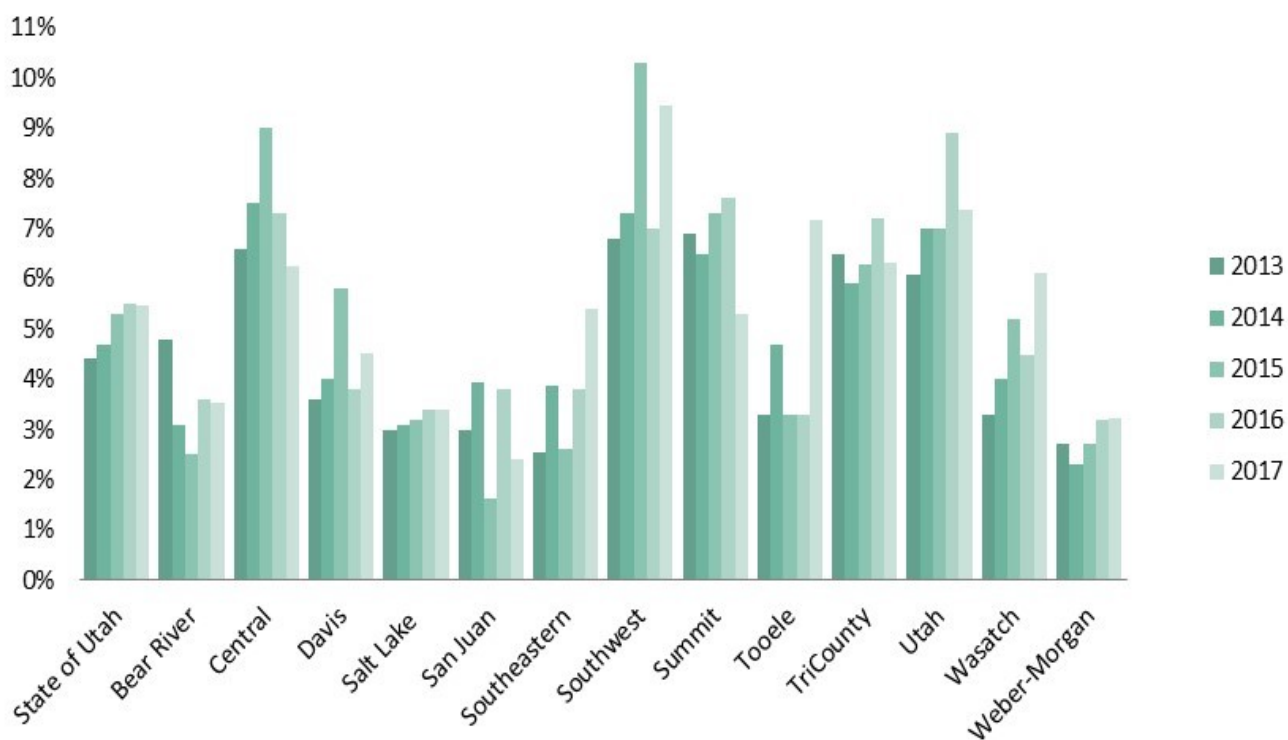
Percentage of Children Immunized for School, 2017 ²		
Facility Type	Adequately Immunized	Total Exemptions
Child Care Facilities and Preschools	90.0%	4.2%
Head Start Centers	93.3%	2.3%
Public School Kindergarten School Entry	90.9%	5.3%
Second-dose Measles (K-12)	95.6%	4.2%
7th Grade Entry	92.4%	5.5%



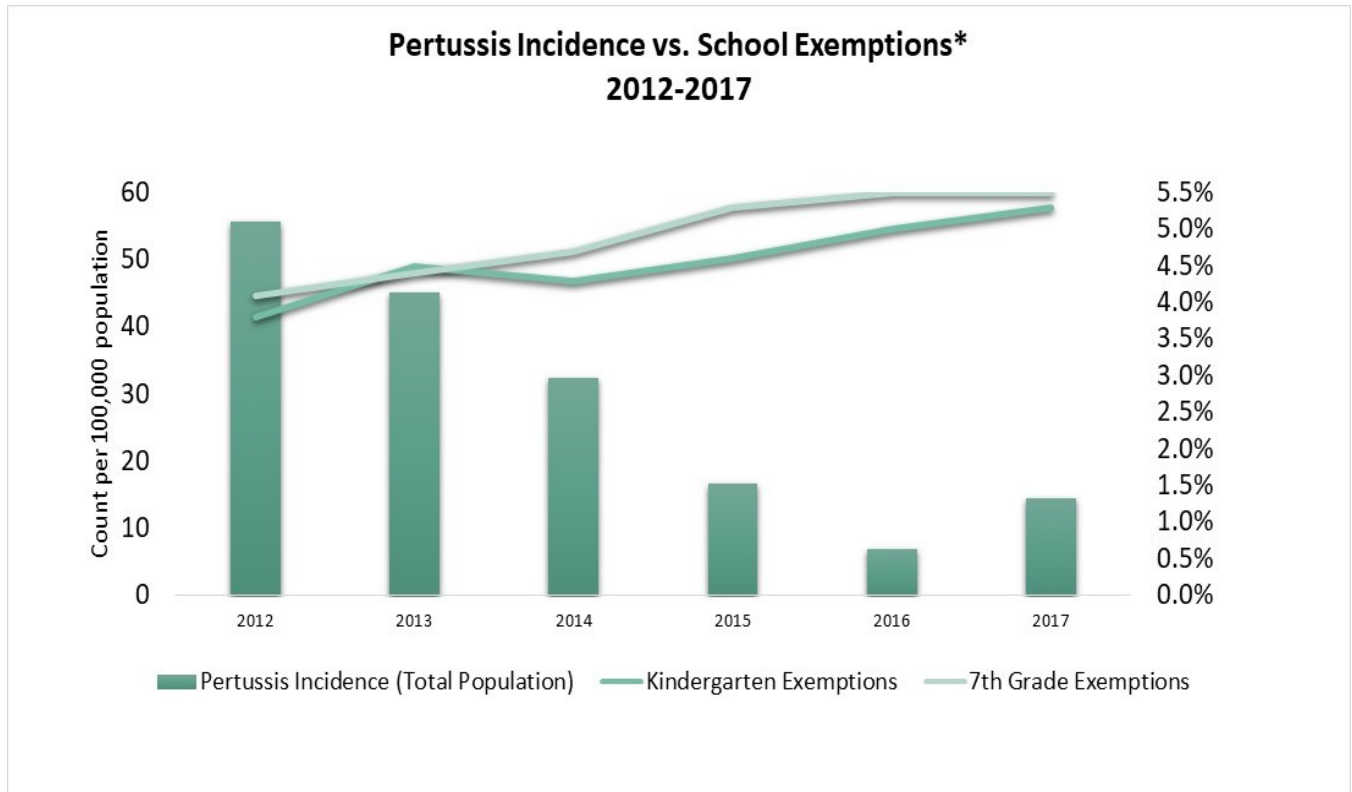
Kindergarten Exemptions by Year and Service Area⁴



7th Grade Exemptions by Year and Service Area⁴



Trends in vaccine-preventable diseases are tracked with the intent that the data can be helpful in developing collaborative immunization campaign efforts. The following pertussis data were provided by the Bureau of Epidemiology, Utah Department of Health, for the state of Utah. Exemption data were obtained from agencies and school districts through electronic reporting to the Immunization Program.



***Notes:** Pertussis incidence is an estimate based on numbers reported to date and could be much higher. Exemption data are not specific to DTaP/Tdap—data include exemption rates for all kindergarten and 7th grade vaccines.

Since 2007, the CDC has published NIS data for teen populations. This survey is similar to the childhood NIS. Survey responses are collected via telephone through random-digit dialing. Those who participated were asked to provide healthcare provider information so their verbal responses over the phone could be validated through the official immunization record. Children ages 13–17 years of age were included in the study. Participants were asked about receiving meningococcal conjugate (MCV4), MMR, Hepatitis B, Varicella, Td or Tdap, and HPV vaccines. The CDC identified three limitations to this survey: 1) there could be bias due to non-response and households without landline telephones; 2) underestimation of vaccine coverage may have occurred due to the exclusive use of provider-verified records; and, 3) some state level and race/ethnicity level data should be interpreted with caution because of small sample sizes. Results from this survey have been reported on national and state levels, which can be seen in the tables below.

NIS Teen 2015 Ages 13–17 ¹		
Vaccine/Vaccine Series	Utah	U.S.
≥1 dose Varicella (No history of varicella)	88.5±4.4	94.9±0.8
≥1 dose Td or Tdap since age 10 years	83.6±5.0	89.6±0.8
≥1 dose Tdap after age 10 years	82.0±5.2	86.4±1.0
≥1 dose MenACWY	71.5±5.8	81.3±1.0

NIS Teen 2016, Ages 13–17 ¹		
Vaccine/Vaccine Series	Utah	U.S.
≥1 dose Varicella (No history of varicella)	83.0±5.9	95.0±0.7
≥1 dose Td or Tdap since age 10 years	83.9±4.9	90.6±0.8
≥1 dose Tdap after age 10 years	83.9±4.9	88.0±0.9
≥1 dose MenACWY	76.6±5.6	82.2±1.0

NIS Teen 2017, Ages 13–17¹

Vaccine/Vaccine Series	Utah	U.S.
≥1 dose Varicella (No history of varicella)	94.4±2.9	95.5±0.7
≥1 Td or Tdap	91.6±3.3	90.7±0.8
≥1 dose Tdap	91.6±3.3	88.7±0.9
≥1 dose MenACWY	85.1±4.3	85.1±0.9

NIS Teen 2017, Females Ages 13–17¹

Vaccine/Vaccine Series	Utah	U.S.
≥1 dose HPV	63.1±8.9	65.1±1.7
HPV UTD*	42.1±9.0	53.1±1.9

NIS Teen 2017, Males Ages 13–17¹

Vaccine/Vaccine Series	Utah	U.S.
≥1 dose HPV	54.7±8.4	62.6±1.6
HPV UTD*	32.9±8.2	44.3±1.7

NIS Teen 20167 Females and Males Ages 13–17¹

Vaccine/Vaccine Series	Utah	U.S.
≥1 dose HPV	58.8±6.1	65.5±1.2
HPV UTD*	37.4±6.1	48.6±1.3

Source: 2017 NIS, Adolescent/Teens, CDC. Estimate presented as point estimate(%) ± 95% confidence interval. *HPV UTD - Includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years and there was at least five months minus four days between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi).

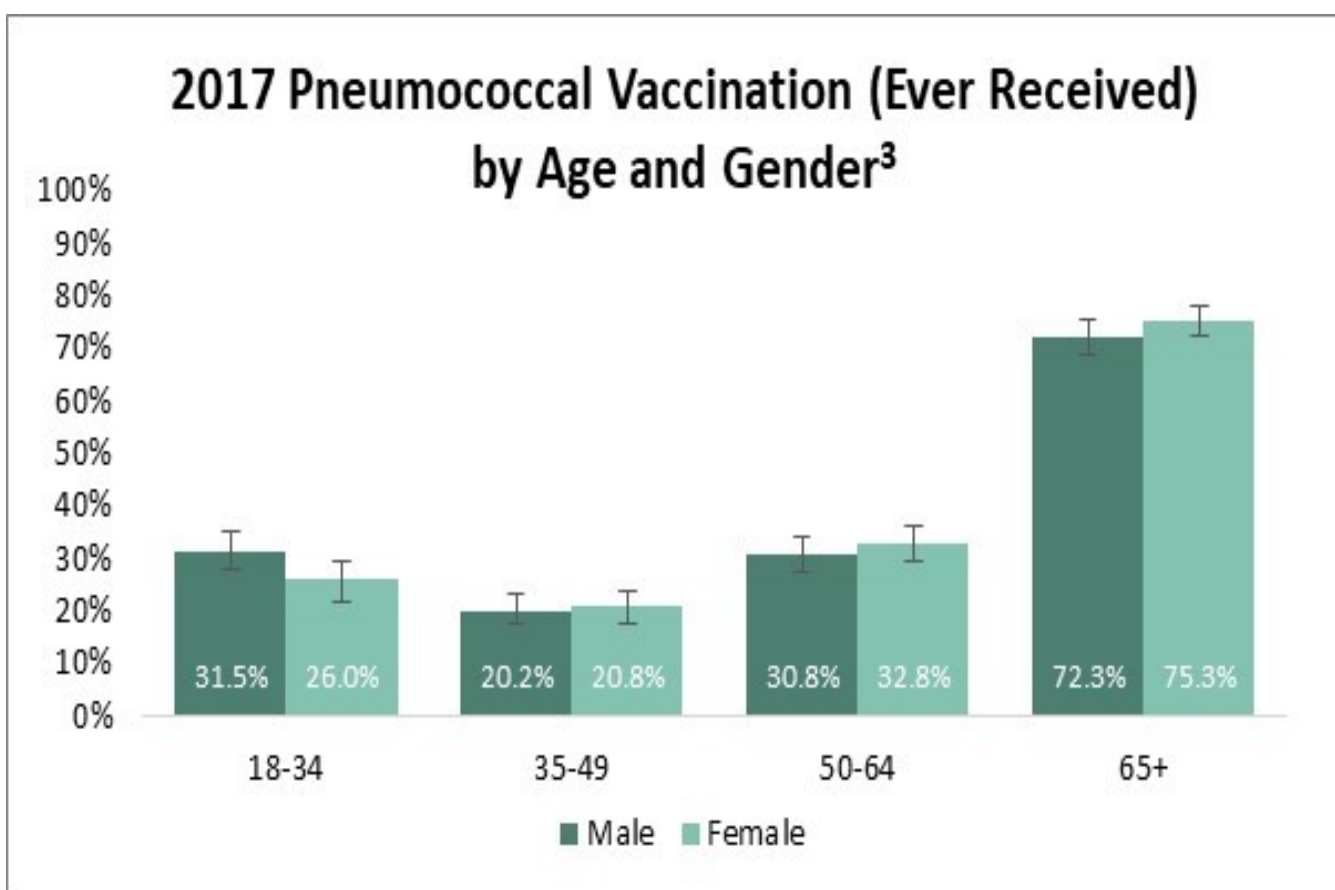
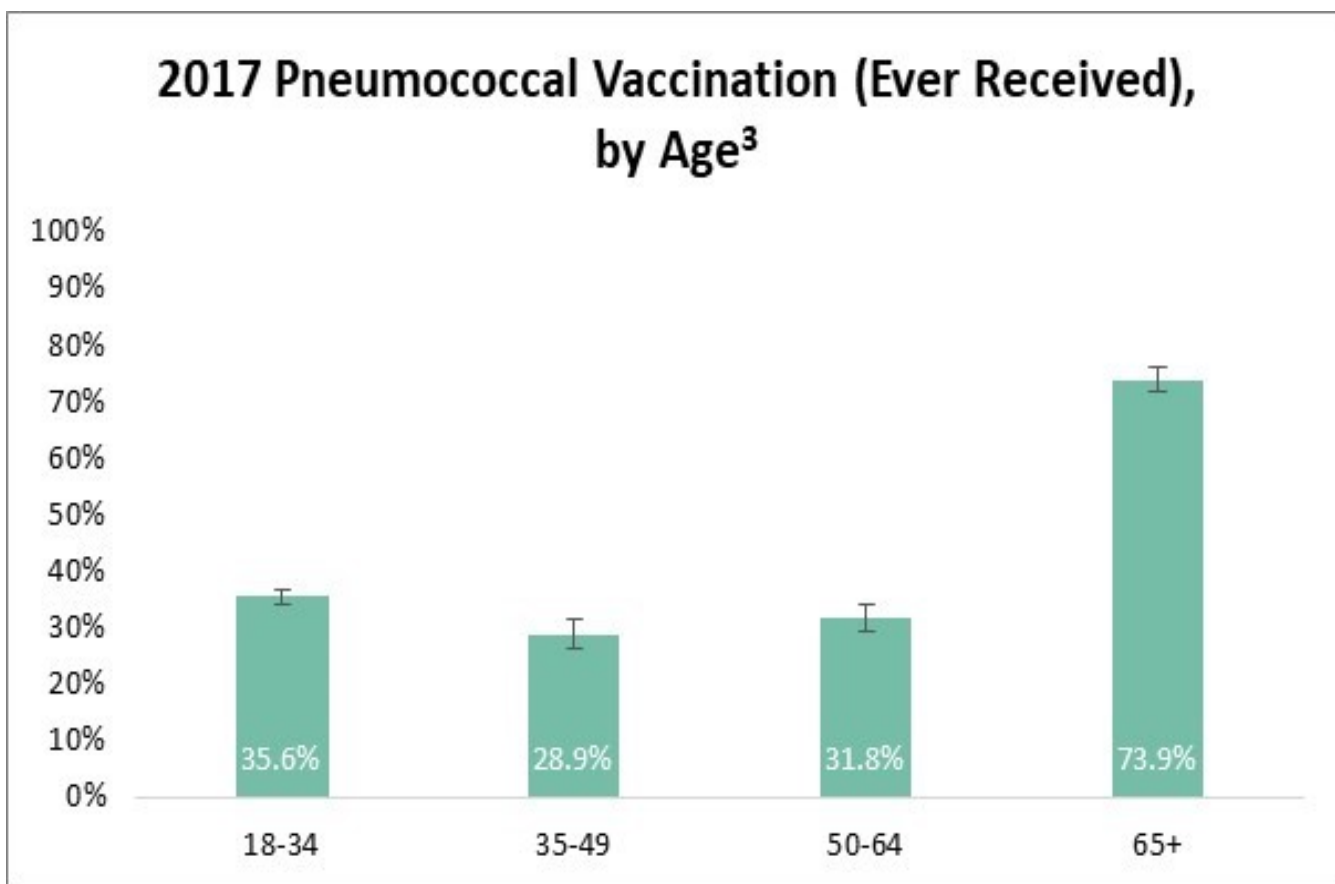
NIS Teen 2012-2017, Utah, Ages 13–15¹

Survey Year	1 Tdap	2 VAR	1 Men ACWY	1 HPV Females	1 HPV Males	3 HPV Females	3 HPV Males	HPV UTD* Females	HPV UTD* Males
<i>Healthy People 2020 Objective</i>	80.0%	90.0%	80.0%	-	-	80.0%	80.0%	80%	80%
2012	76.9±9.1	64.9±10.7	57.1±9.2	37.4±12.2	N/A	22.3±10.3	N/A	N/A	N/A
2013	87.5±6.4	64.5±9.9	63.0±8.5	43.8±11.8	13.9±8.0	19.8±10.2	N/A	N/A	N/A
2014	89.1±4.7	73.5±8.3	65.6±7.7	60.2±10.5	30.9±10.2	25.2±9.2	14.4±7.3	N/A	N/A
2015	79.3±7.2	65.8±8.5	66.7±8.0	35.3±11.7	37.5±11.4	18.6±9.0	18.7±9.7	N/A	N/A
2016	87.6±5.4	75.2±7.8	79.7±6.5	58.8±12.4	44.1± 10.9	32.7± 11.4	17.9± 9.0	40.3±12.0	23.2±9.4
2017	90.9±4.2	86.1±6.1	88.3±4.6	66.5±10.7	54.4±10.6	N/A	N/A	39.7±11.4	30.8±10.0

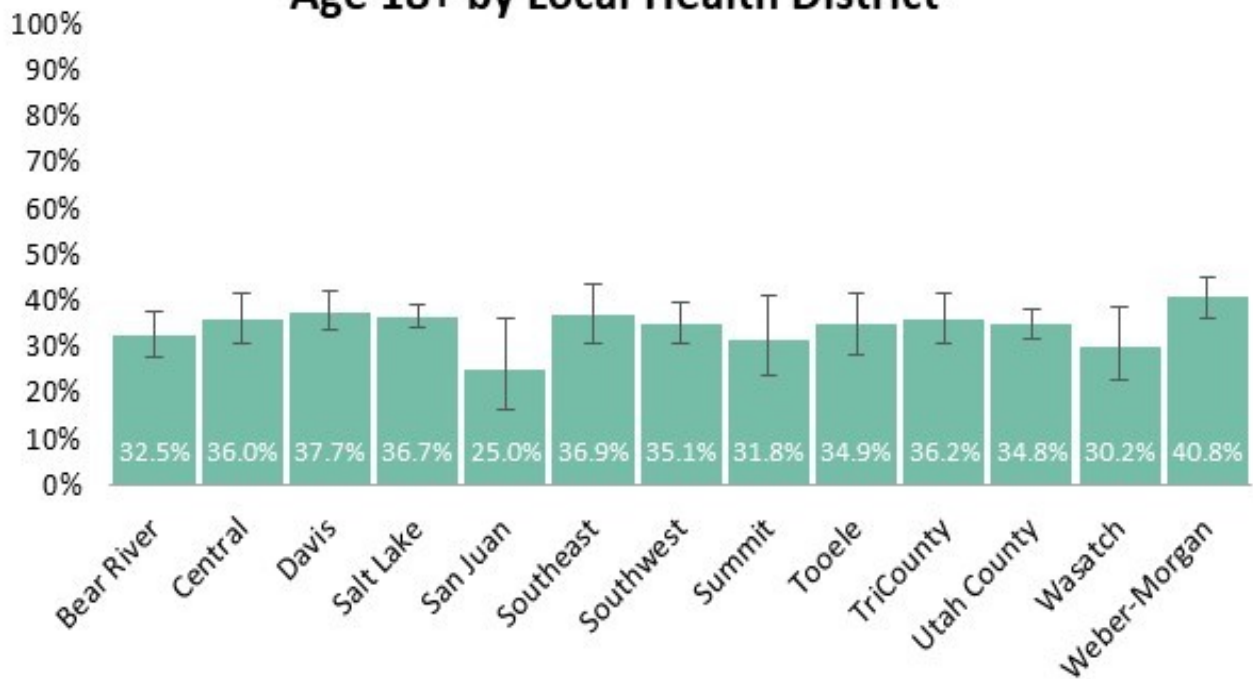
NIS Teen 2012-2017, U.S., Ages 13–15¹

Survey Year	1 Tdap	2 VAR	1 Men ACWY	1 HPV Females	1 HPV Males	3 HPV Females	3 HPV Males	HPV UTD Females	HPV UTD Males
<i>Healthy People 2020 Objective</i>	80.0%	90.0%	80.0%	-	-	80.0%	80.0%	80%	80%
2012	85.3±1.2	76.8±1.7	73.8±1.5	50.0±2.3	20.9±1.9	28.1±2.0	6.9±1.3	N/A	N/A
2013	87.5±1.1	80.7±1.5	78.1±1.4	54.3±2.4	33.9±2.4	32.7±2.4	13.1±1.7	N/A	N/A
2014	88.3±1.1	82.1±1.4	79.4±1.4	56.2±2.4	42.3±2.4	34.4±2.3	20.6±2.1	N/A	N/A
2015	87.1±1.2	84.6±1.4	80.8±1.4	60.2±2.4	49.0±2.3	37.1±2.3	27.1±2.1	N/A	N/A
2016	88.0±1.2	87.0±1.3	81.8±1.4	62.1±2.3	54.7±2.2	37.2±2.4	29.5±2.1	45.1±2.5	36.4±2.2
2017	88.6±1.1	90.3±1.1	84.9±1.2	66.5±2.2	61.8±2.1	N/A	N/A	49.9±2.5	42.3±2.2

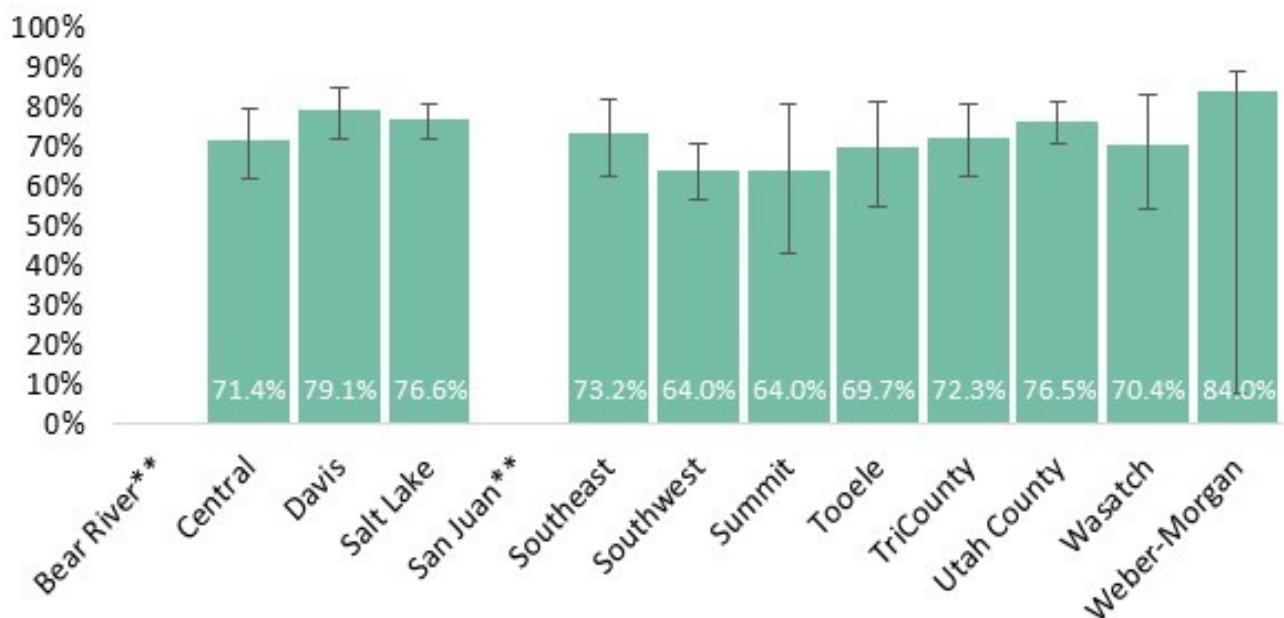
Source: 2012-2017 NIS, Adolescent/Teens, CDC. Estimate presented as point estimate(%) ± 95% confidence interval. *HPV UTD - Includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years and there was at least five months minus four days between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi).



2017 Pneumococcal Vaccination (Ever Received) Age 18+ by Local Health District³

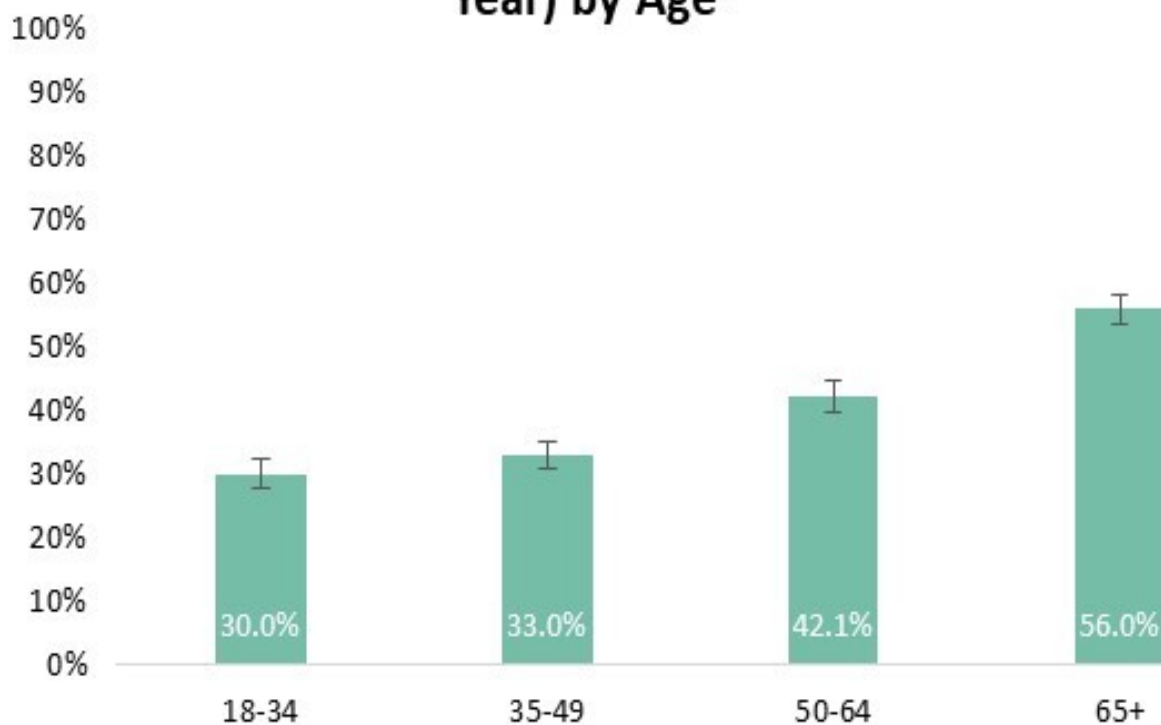


2017 Pneumococcal Vaccination (Ever Received) Age 65+ by Local Health District³

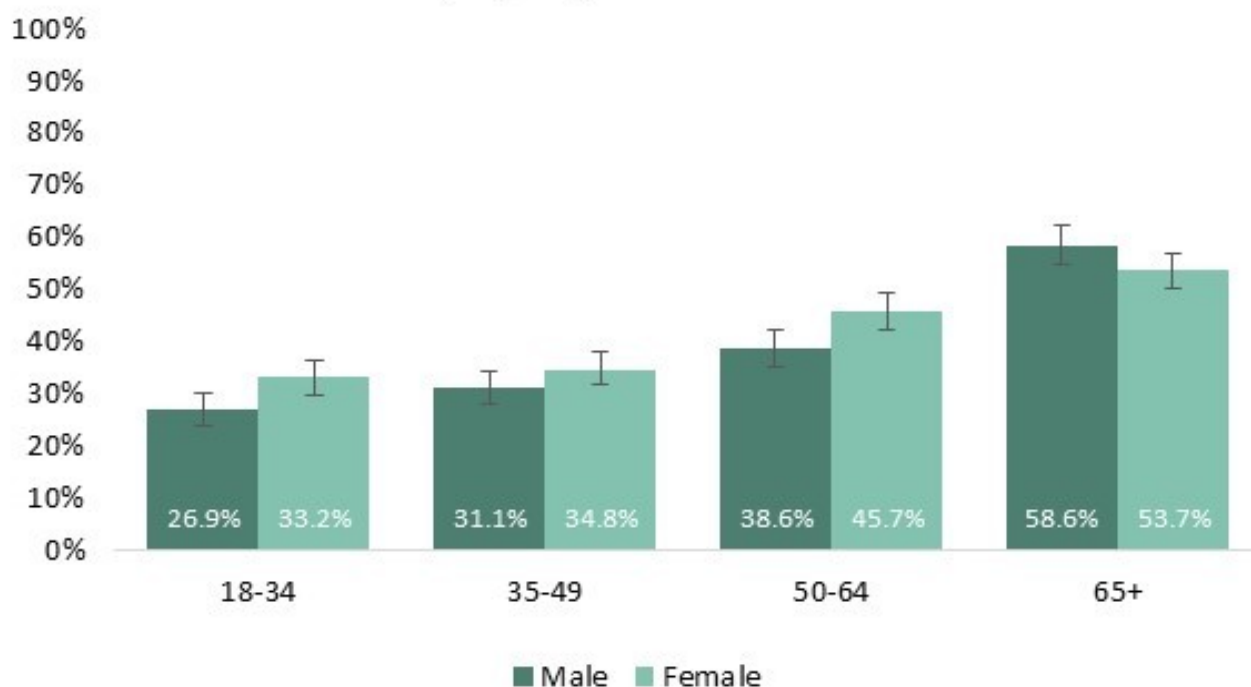


Source: BRFSS, Utah, 2017. Crude Rates. **The estimate has been suppressed because 1) The relative standard error is greater than 50% or the relative standard error can't be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. 2) the observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.

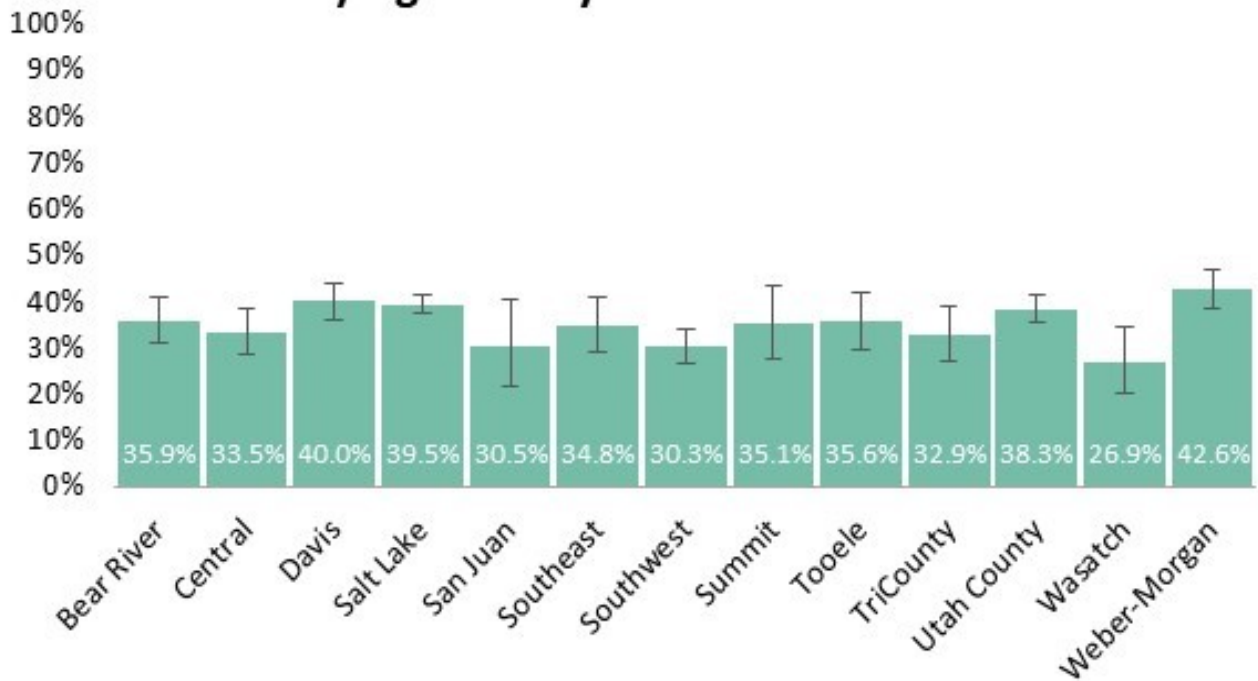
2017 Influenza Vaccination (Within the Past Year) by Age³



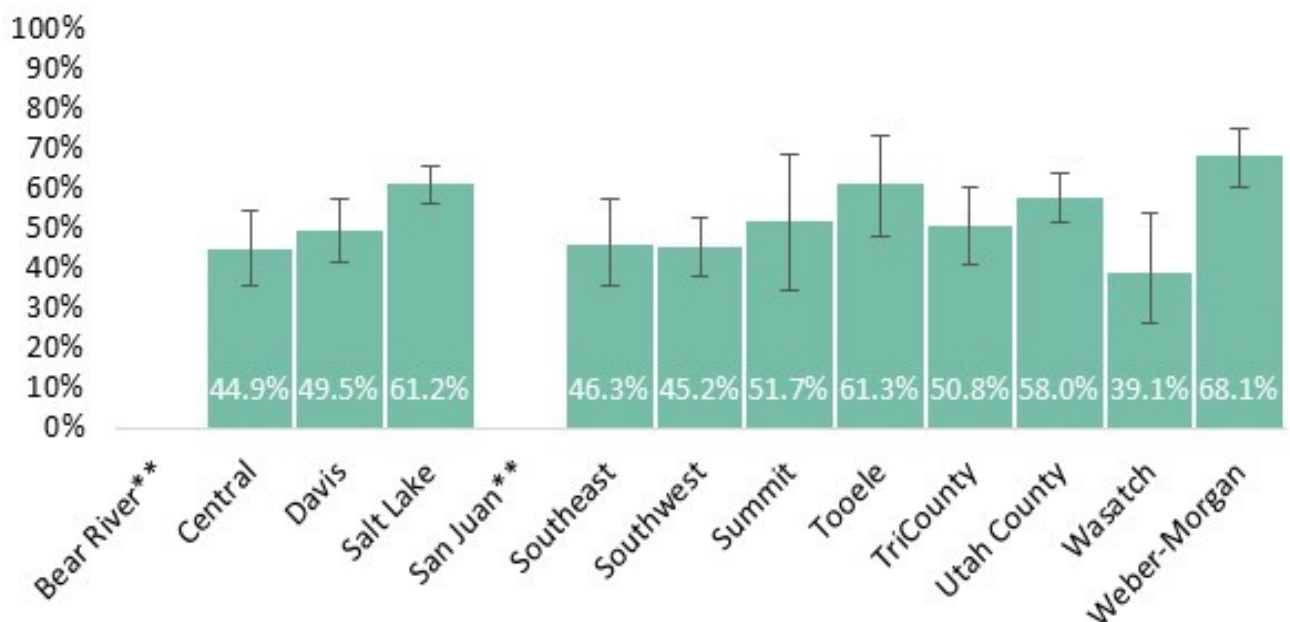
2017 Influenza Vaccination (Within the Past Year) by Age and Gender^{3*}



2017 Influenza Vaccination (Within the Past Year) Age 18+ by Local Health District

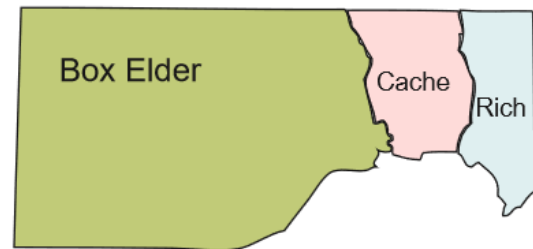


2017 Influenza Vaccination (Within the Past Year) Age 65+ by Local Health District³



Source: BRFSS, Utah, 2017. Crude Rates. **The estimate has been suppressed because 1) The relative standard error is greater than 50% or the relative standard error can't be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. 2) the observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.

Early Childhood Immunization



24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	3,246	
	Total	Percent
≥3 doses DTaP	3,014	92.9%
≥4 doses DTaP	2,690	82.9%
≥3 doses Polio	2,992	92.2%
≥1 dose MMR	2,897	89.2%
≥3 doses Hib	2,862	88.2%
≥1 dose Hib	3,213	99.0%
≥3 doses Hep B	3,002	92.5%
Hep B Birth dose	2,819	86.8%
≥1 dose Varicella	2,901	89.4%
≥3 doses PCV	2,972	91.6%
≥4 doses PCV	2,686	82.7%
≥2 doses Hep A	2,468	76.0%
≥1 dose Rotavirus	3,009	92.7%
4:3:1	2,666	82.1%
4:3:1:3	2,638	81.3%
4:3:1:4	2,554	78.7%
4:3:1:3:3	2,622	80.8%
4:3:1:0:3:1	2,638	81.3%
4:3:1:3:3:1	2,611	80.4%
4:3:1:4:3:1	1,232	38.0%
4:3:1:0:3:1:4	2,528	77.9%
4:3:1:3:3:1:4	2,520	77.6%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	886	
	Total	Percent
≥1 dose DTaP	880	99.3%
≥1 dose Polio	877	99.0%
≥1 dose Hib	879	99.2%
≥1 dose Hep B	875	98.8%
≥2 doses Hep B	829	93.6%
≥1 dose PCV	880	99.3%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	1,346	
	Total	Percent
≥2 doses DTaP	977	72.6%
≥2 doses Polio	971	72.1%
≥2 doses Hib	968	71.9%
≥2 doses Hep B	1,260	93.6%
≥2 doses PCV	971	72.1%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella . 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1 MMR, 4 HIB, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4 = 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV. .

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	3,096	
	Total	Percent
≥3 doses DTaP	2,030	65.6%
≥2 doses Polio	2,639	85.2%
≥1 dose MMR	527	17.0%
≥2 doses Hib	2,630	84.9%
≥3 doses Hib	1,182	38.2%
≥2 doses Hep B	2,964	95.7%
≥3 doses Hep B	2,150	69.4%
≥1 dose Varicella	590	19.1%
≥3 doses PCV	2,015	65.1%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	4,536	
	Total	Percent
≥3 doses DTaP	3,329	73.4%
≥4 doses DTaP	969	21.4%
≥3 doses Polio	3,308	72.9%
≥1 dose MMR	1,674	36.9%
≥3 doses Hib	2,346	51.7%
≥1 dose Hib	4,496	99.1%
≥3 doses Hep B	3,454	76.1%
≥1 dose Varicella	1,756	38.7%
≥3 doses PCV	3,315	73.1%
>4 doses of PCV	1,731	38.2%
4:3:1	952	21.0%
4:3:1:3	938	20.7%
4:3:1:4	931	20.5%
4:3:1:3:3	942	20.8%
4:3:1:0:3	957	21.1%
4:3:1:4:3	414	9.1%
4:3:1:3:3:1	908	20.0%
4:3:1:0:3:1	913	20.1%
4:3:1:4:3:1	414	9.1%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	5,795	
	Total	Percent
≥3 doses DTaP	4,488	77.4%
≥4 doses DTaP	1,975	34.1%
≥3 doses Polio	4,457	76.9%
≥1 dose MMR	2,796	48.2%
≥3 doses Hib	3,430	59.2%
≥1 dose Hib	5,739	99.0%
≥3 doses Hep B	4,594	79.3%
≥1 dose Varicella	2,882	49.7%
≥3 doses PCV	4,460	77.0%
≥4 doses PCV	2,748	47.4%
4:3:1	1,944	33.5%
4:3:1:3	1,972	33.5%
4:3:1:4	1,915	33.5%
4:3:1:3:3	1,918	33.1%
4:3:1:0:3	1,941	33.5%
4:3:1:4:3	843	14.5%
4:3:1:3:3:1	1,882	32.5%
4:3:1:0:3:1	1,893	32.7%
4:3:1:4:3:1	847	14.6%
4:3:1:3:3:1:4	1,837	31.7%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	22,893	Female Total	11,114	Male Total	11,702
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	9,401	41.1%	5,073	45.6%	4,303	36.8%
2 HPV	5,557	24.3%	3,056	27.5%	2,486	21.1%
3 HPV	2,712	11.8%	1,600	14.4%	1,103	9.4%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	22,893	
	Total	Percent
≥1 dose Meningococcal	15,760	68.8%
≥1 Tdap	16,876	73.7%
≥1 Varicella	19,534	85.3%
≥2 Varicella	15,332	67.0%

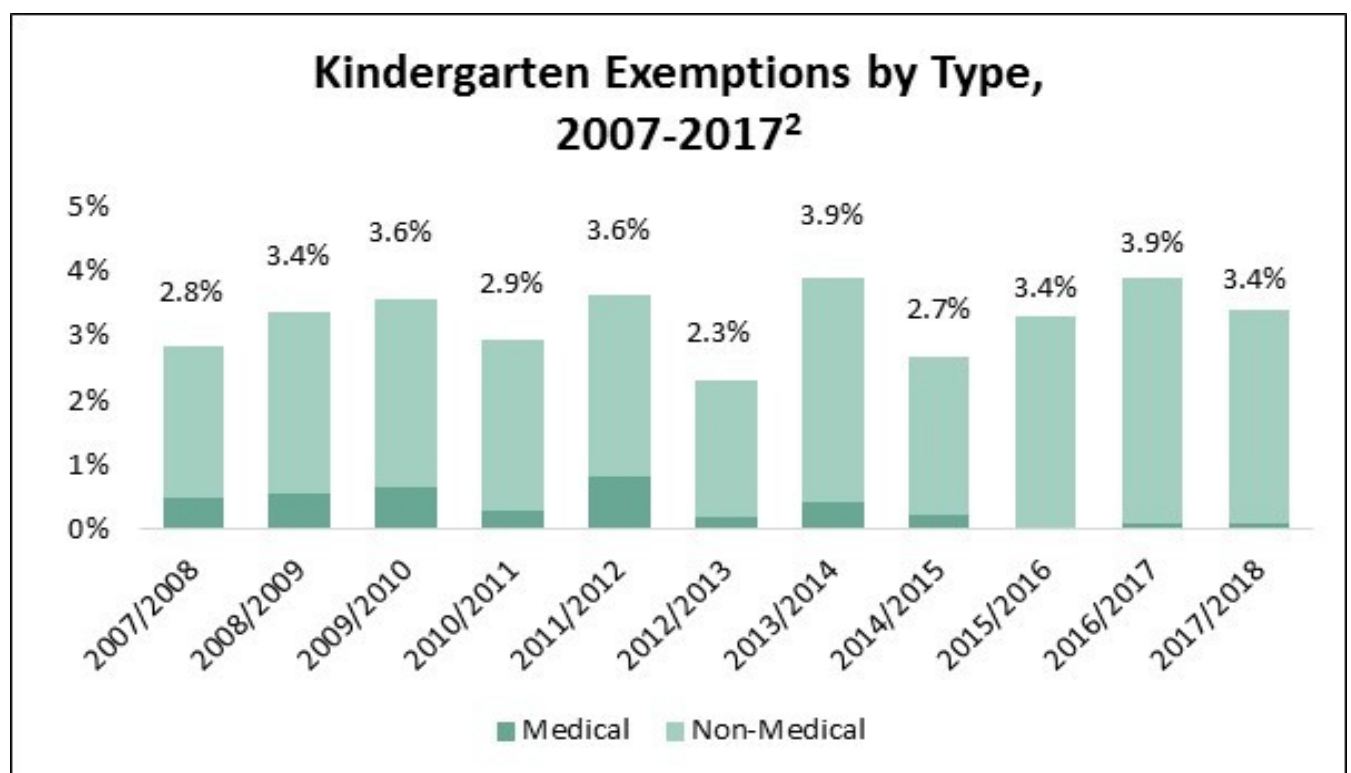
16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	7,296	
	Total	Percent
≥2 dose Meningococcal	1,167	16.0%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	68,122	
	Total	Percent
≥1 dose Influenza in lifetime	44,283	65.0%
≥1 dose Influenza last flu season*	18,248	26.8%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

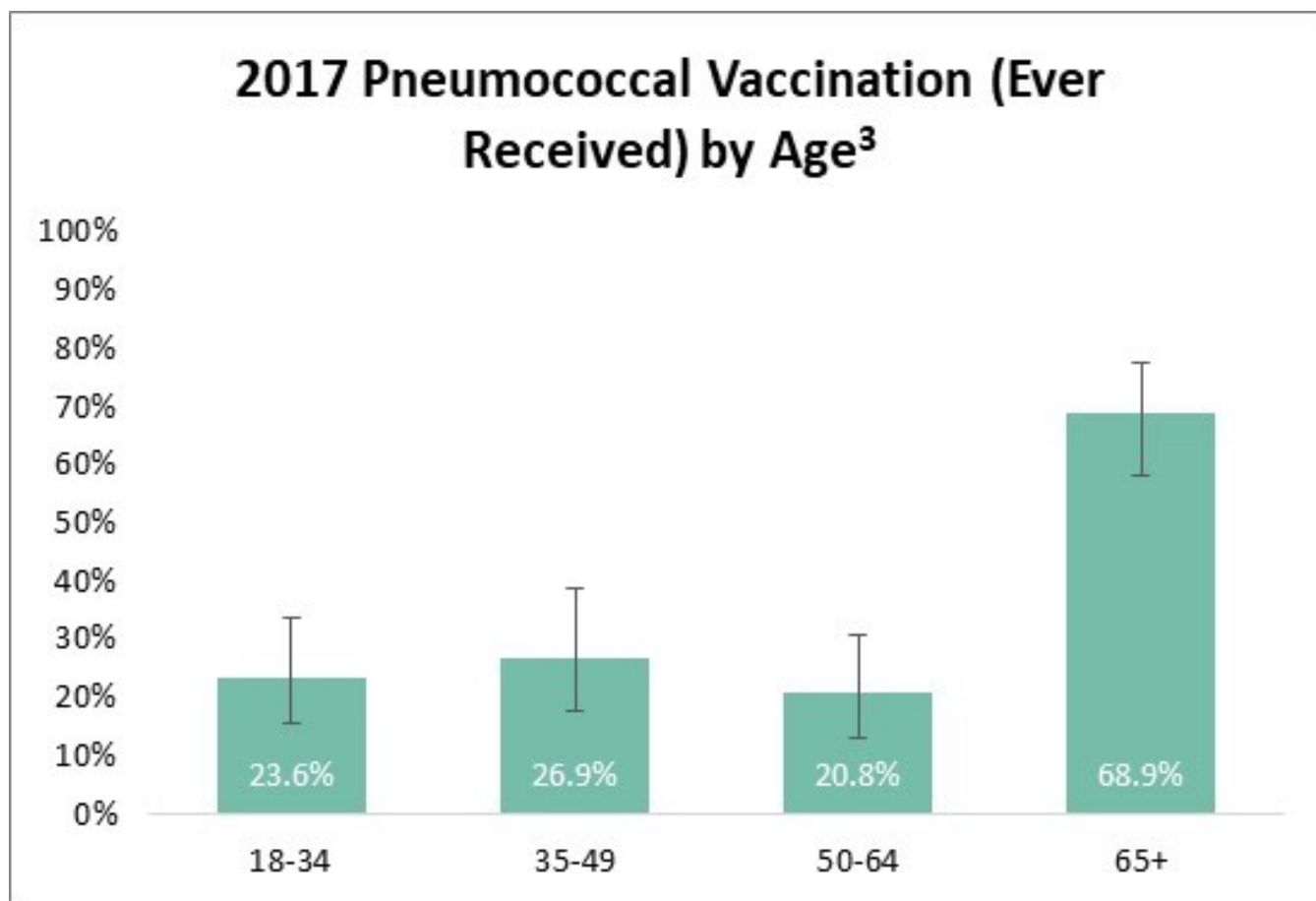
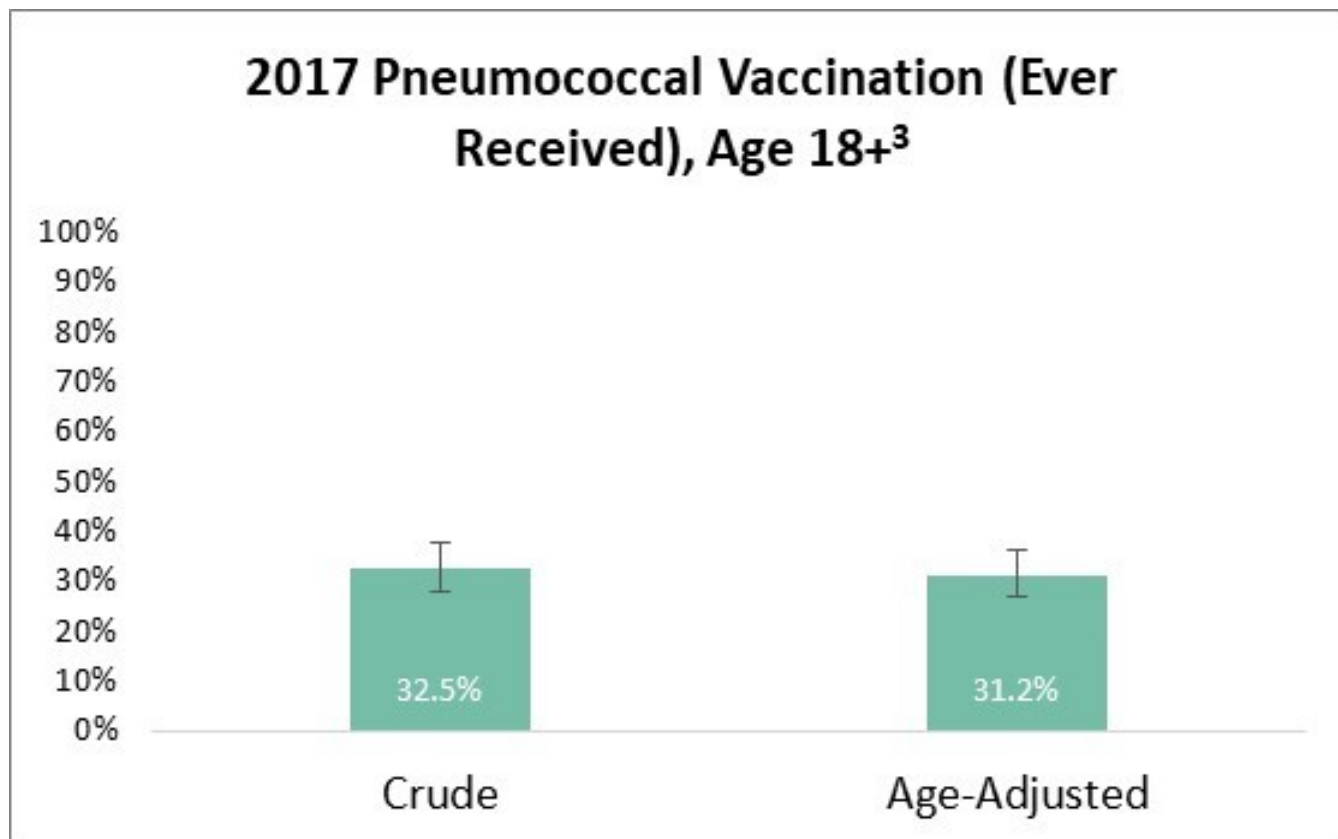
Adequately Immunized by School District 2017 ²								
	Box Elder		Cache		Logan City		Rich	
	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp
Kindergarten School Entry	91.1%	3.8%	94.5%	3.5%	98.1%	1.7%	95.3%	4.7%
Second-Dose Measles (K-12)	97.0%	2.9%	97.0%	3.0%	99.2%	0.8%	98.6%	1.4%
7th Grade Entry	95.8%	4.0%	96.8%	3.1%	98.7%	1.3%	93.1%	6.9%

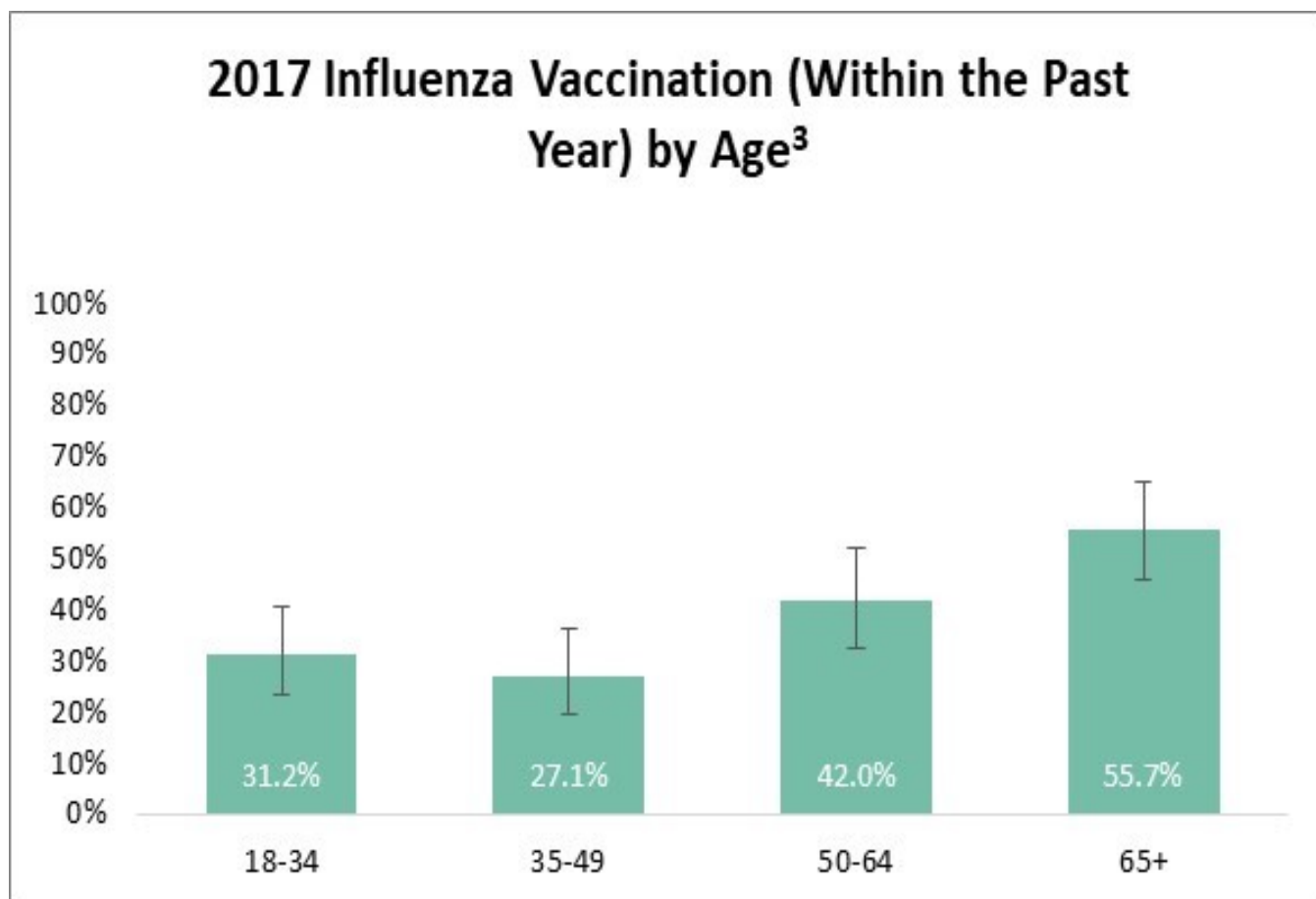
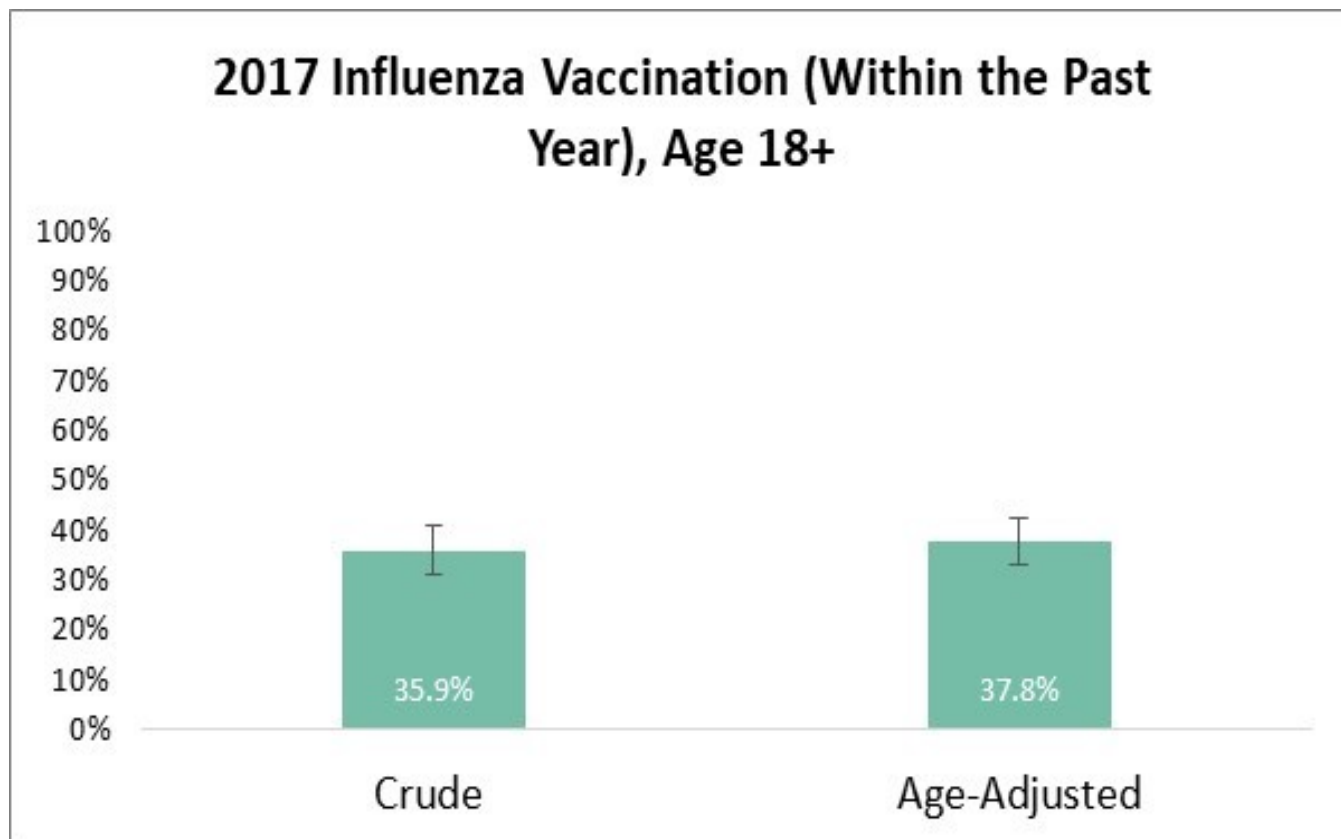
Immunized for Child Care 2017 ²		
	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	96.6%	1.1%
Head Start Centers	93.9%	3.2%

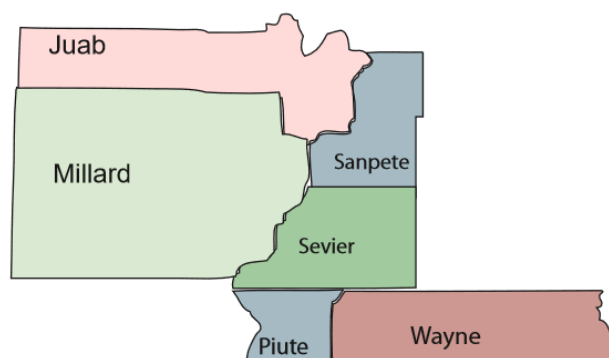


≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	134,611	
	Total	Percent
≥1 dose Influenza last season*	33,413	24.8%
≥1 dose influenza in lifetime	78,139	58.0%
≥1 Tdap	70,888	52.7%
≥1 Varicella	13,448	10.0%
≥1 HPV	7,301	5.4%
≥1 Zoster**	2,335	1.7%
≥1 MMR	51,760	38.5%
≥1 PCV13	13,682	10.2%
≥1PPSV23	15,403	11.4%
≥1 Hep A	38,761	28.8%
≥1 Hep B	48,573	36.1%
≥1 Meningococcal	17,456	13.0%
≥1 Hib	30,625	22.8%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended that Shingrix is preferred over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable to previous reports.





Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	1,144	
	Total	Percent
≥3 doses DTaP	1,027	89.8%
≥4 doses DTaP	823	71.9%
≥3 doses Polio	1,010	88.3%
≥1 dose MMR	981	85.8%
≥3 doses Hib	972	85.0%
≥1 dose Hib	1,126	98.4%
≥3 doses Hep B	1,027	89.8%
Hep B Birth dose	963	84.2%
≥1 dose Varicella	964	84.3%
≥3 doses PCV	997	87.2%
≥4 doses PCV	807	70.5%
≥2 doses Hep A	682	59.6%
≥1 dose Rotavirus	952	83.2%
4:3:1	806	70.5%
4:3:1:3	792	69.2%
4:3:1:4	730	63.8%
4:3:1:3:3	782	68.4%
4:3:1:0:3:1	787	68.8%
4:3:1:3:3:1	774	67.7%
4:3:1:4:3:1	560	49.0%
4:3:1:0:3:1:4	718	62.8%
4:3:1:3:3:1:4	711	62.2%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	286	
	Total	Percent
≥1 dose DTaP	284	99.3%
≥1 dose Polio	283	99.0%
≥1 dose Hib	281	98.3%
≥1 dose Hep B	280	97.9%
≥2 doses Hep B	257	89.9%
≥1 dose PCV	281	98.3%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	443	
	Total	Percent
≥2 doses DTaP	288	65.0%
≥2 doses Polio	287	64.8%
≥2 doses Hib	286	64.6%
≥2 doses Hep B	408	92.1%
≥2 doses PCV	281	63.4%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella . 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 HIB, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2016 and 07/01/2017		
Total	1,069	
	Total	Percent
≥3 doses DTaP	629	58.8%
≥2 doses Polio	872	81.6%
≥1 dose MMR	216	20.2%
≥2 doses Hib	870	81.4%
≥3 doses Hib	513	48.0%
≥2 doses Hep B	1,011	94.6%
≥3 doses Hep B	721	67.4%
≥1 dose Varicella	204	19.1%
≥3 doses PCV	604	56.5%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	1,591	
	Total	Percent
≥3 doses DTaP	1,070	67.3%
≥4 doses DTaP	313	19.7%
≥3 doses Polio	156	9.8%
≥1 dose MMR	616	38.7%
≥3 doses Hib	924	58.1%
≥1 dose Hib	1,566	98.4%
≥3 doses Hep B	1,171	73.6%
≥1 dose Varicella	587	36.9%
≥3 doses PCV	1,043	65.6%
>4 dose PCV	505	31.7%
4:3:1	300	18.9%
4:3:1:3	299	18.8%
4:3:1:4	285	17.9%
4:3:1:3:3	292	18.4%
4:3:1:0:3	294	18.5%
4:3:1:4:3	224	14.1%
4:3:1:3:3:1	283	17.8%
4:3:1:0:3:1	285	17.9%
4:3:1:4:3:1	218	13.7%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	2,027	
	Total	Percent
≥3 doses DTaP	1,465	72.3%
≥4 doses DTaP	614	30.3%
≥3 doses Polio	1,448	71.4%
≥1 dose MMR	994	49.0%
≥3 doses Hib	1,303	64.3%
≥1 dose Hib	1,997	98.5%
≥3 doses Hep B	1,567	77.3%
≥1 dose Varicella	956	47.2%
≥3 doses PCV	1,430	70.5%
≥4 doses PCV	822	40.6%
4:3:1	594	29.3%
4:3:1:3	595	29.4%
4:3:1:4	562	27.7%
4:3:1:3:3	585	28.9%
4:3:1:0:3	558	29.0%
4:3:1:4:3	429	21.2%
4:3:1:3:3:1	570	28.1%
4:3:1:0:3:1	576	28.4%
4:3:1:4:3:1	420	20.7%
4:3:1:3:3:1:4	541	26.7%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	9,691	Female Total	4,595	Male Total	4,990
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	4,250	43.9%	2,309	50.3%	1,922	38.5%
2 HPV	2,205	22.8%	1,274	27.7%	921	18.5%
3 HPV	992	10.2%	611	13.3%	375	7.5%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	9,691	
	Total	Percent
≥1 dose Meningococcal	6,581	67.9%
≥1 Tdap	7,481	77.2%
≥1 Varicella	8,273	85.4%
≥2 Varicella	6,477	66.8%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	3,439	
	Total	Percent
≥2 dose Meningococcal	447	13.0%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	26,448	
	Total	Percent
≥1 dose Influenza in lifetime	15,122	57.2%
≥1 dose Influenza last flu season*	5,970	22.6%

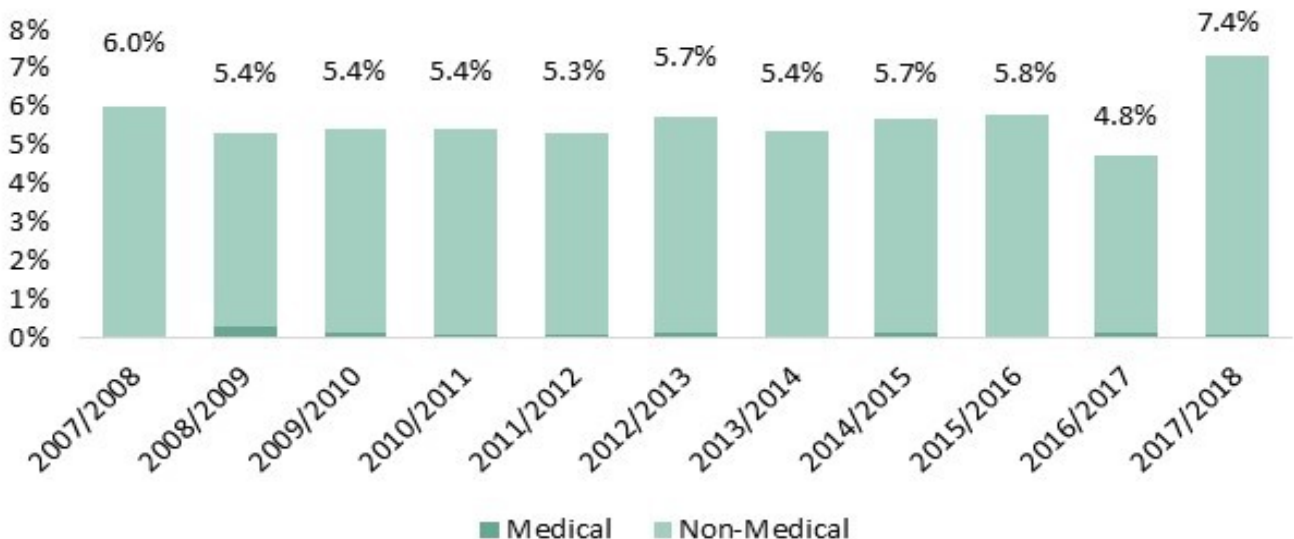
Adequately Immunized by School District 2017²

	Juab		Millard		N Sanpete		Piute		Sevier		S Sanpete		Tintic		Wayne	
	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp
Kindergarten School Entry	87.6%	7.0%	87.3%	6.4%	84.6%	12.6%	84.6%	15.4%	92.5%	4.1%	84.1%	8.7%	100%	0%	91.4%	8.6%
Second-Dose Measles (K-12)	92.5%	7.4%	95.2%	4.6%	89.8%	8.2%	97.4%	2.6%	95.5%	4.5%	94.9%	4.8%	97.5%	2.5%	93.0%	7.0%
7th Grade Entry	87.7%	10.5%	91.7%	3.9%	89.9%	9.2%	96.0%	0%	91.1%	8.7%	96.8%	2.5%	95.2%	4.8%	94.4%	5.6%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	89.3%	0.9%
Head Start Centers	94.4%	2.4%

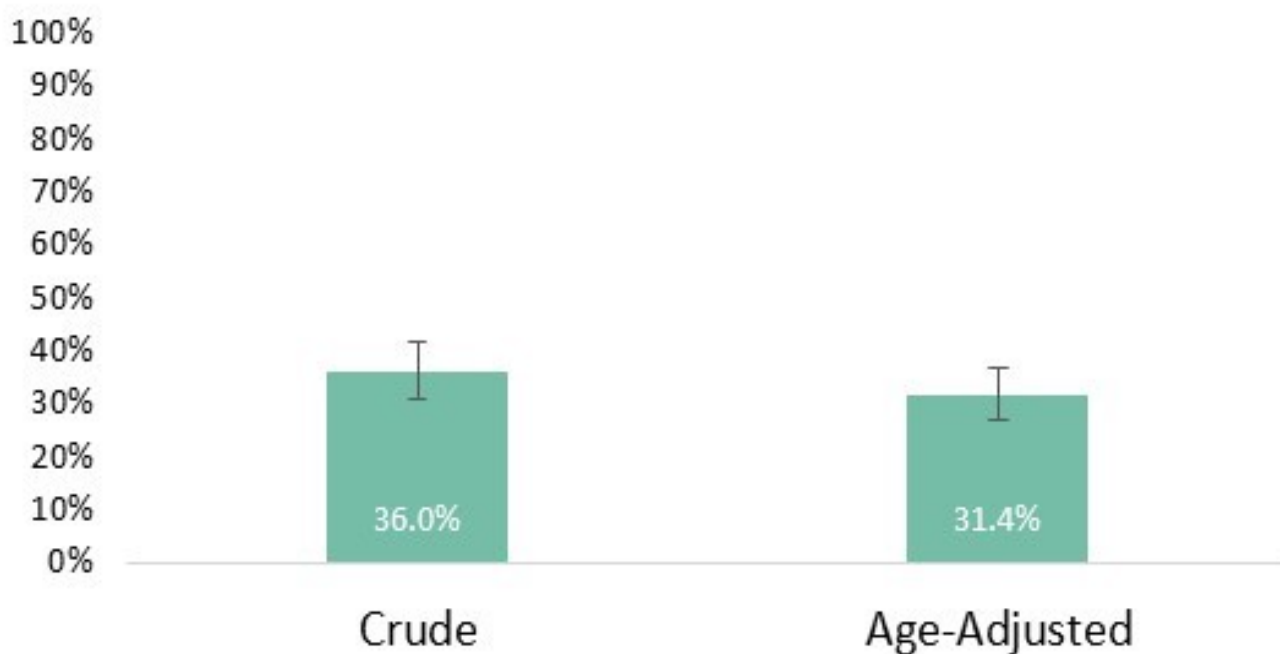
Kindergarten Exemptions by Type, 2007-2017²



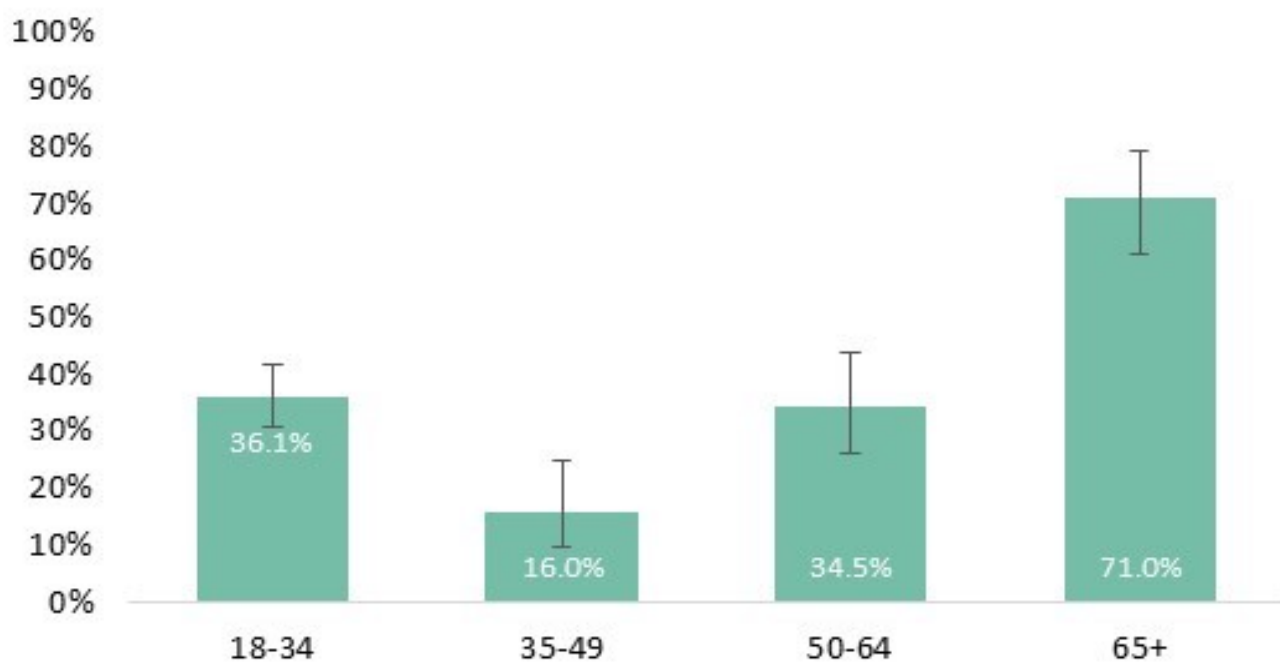
≥19 Years of Age ⁵		
Adults in USIIS born on or before 07/1/1999		
Total	60,597	
	Total	Percent
≥1 dose Influenza last season*	13,720	22.6%
≥1 dose influenza in lifetime	38,160	63.0%
≥1 Tdap	25,417	41.9%
≥1 Varicella	4,891	8.1%
≥1 HPV	2,526	4.2%
≥1 Zoster**	576	1.0%
≥1 MMR	18,882	31.2%
≥1 PCV13	7,673	12.7%
≥1PPSV23	8,334	13.8%
≥1 Hep A	17,355	28.6%
≥1 Hep B	18,987	31.3%
≥1 Meningococcal	5,375	8.9%
≥1 HIB	10,055	16.6%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has indicated Shingrix is preferred over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

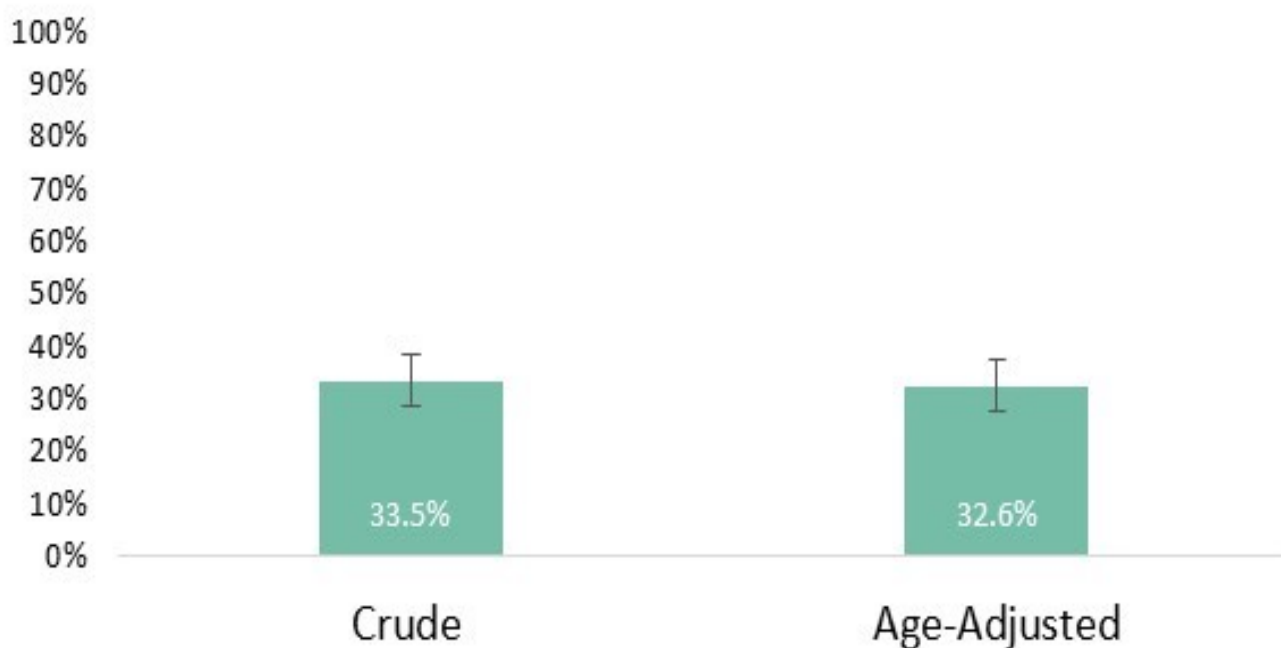
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



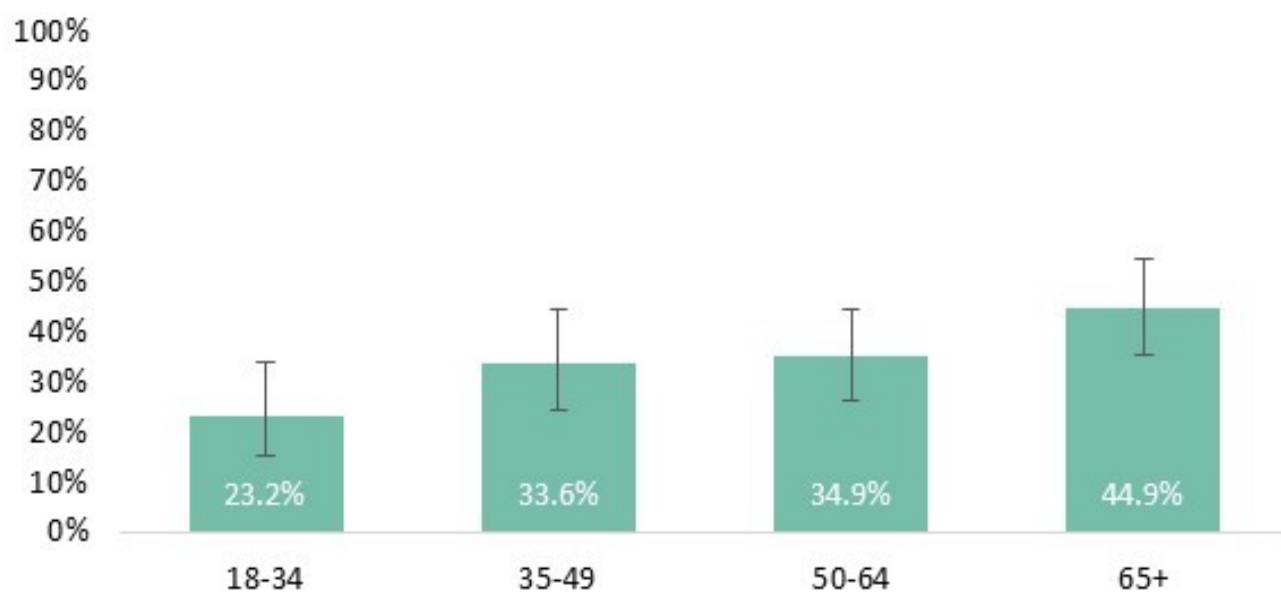
2017 Pneumococcal Vaccination (Ever Received) by Age³

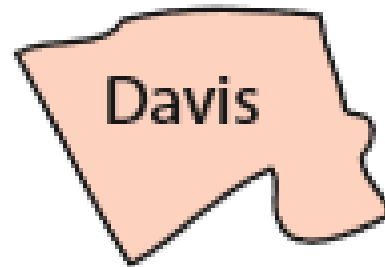


2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	5,984	
	Total	Percent
≥3 doses DTaP	5,382	89.9%
≥4 doses DTaP	4,564	76.3%
≥3 doses Polio	5,288	88.4%
≥1 dose MMR	5,326	89.0%
≥3 doses Hib	5,328	89.0%
≥1 dose Hib	5,910	98.8%
≥3 doses Hep B	5,116	85.5%
Hep B Birth dose	5,140	85.9%
≥1 dose Varicella	5,329	89.1%
≥3 doses PCV	5,359	89.6%
≥4 doses PCV	4,561	76.2%
≥2 doses Hep A	4,299	71.8%
≥1 dose Rotavirus	5,585	93.3%
4:3:1	4,440	74.2%
4:3:1:3	4,428	74.0%
4:3:1:4	4,265	71.3%
4:3:1:3:3	4,314	72.1%
4:3:1:0:3:1	4,302	71.9%
4:3:1:3:3:1	4,290	71.7%
4:3:1:4:3:1	3,980	66.5%
4:3:1:0:3:1:4	4,155	69.4%
4:3:1:3:3:1:4	4,151	69.4%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	1,595	
	Total	Percent
≥1 dose DTaP	1,589	99.6%
≥1 dose Polio	1,580	99.1%
≥1 dose Hib	1,583	99.2%
≥1 dose Hep B	1,581	99.1%
≥2 doses Hep B	1,464	91.8%
≥1 dose PCV	1,576	98.8%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	2,339	
	Total	Percent
≥2 doses DTaP	1,623	69.4%
≥2 doses Polio	1,613	69.0%
≥2 doses Hib	1,614	69.0%
≥2 doses Hep B	2,173	92.9%
≥2 doses PCV	1,600	68.4%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1

<13 Months of Age ⁵			
Children in USIIS born between 06/02/2017 and 07/01/2018			
Total	5,368		
	Total	Percent	
≥3 doses DTaP	3,142	58.5%	
≥2 doses Polio	4,402	82.0%	
≥1 dose MMR	1,245	23.2%	
≥2 doses Hib	4,407	82.1%	
≥3 doses Hib	3,063	57.1%	
≥2 doses Hep B	5,061	94.3%	
≥3 doses Hep B	3,262	60.8%	
≥1 dose Varicella	1,205	22.4%	
≥3 doses PCV	3,192	59.5%	

<19 Months of Age ⁵			
Children in USIIS born between 12/02/2016 and 07/01/2018			
Total	7,976		
	Total	Percent	
≥3 doses DTaP	5,431	68.1%	
≥4 doses DTaP	1,788	22.4%	
≥3 doses Polio	5,382	67.5%	
≥1 dose MMR	3,377	42.3%	
≥3 doses Hib	5,323	66.7%	
≥1 dose Hib	7,888	98.9%	
≥3 doses Hep B	5,453	68.4%	
≥1 dose Varicella	3,325	41.7%	
≥3 doses PCV	5,488	68.8%	
>4 dose PCV	2,588	32.4%	
4:3:1	1,706	21.4%	
4:3:1:3	1,700	21.3%	
4:3:1:4	1,657	20.8%	
4:3:1:3:3	1,674	21.0%	
4:3:1:0:3	1,679	21.1%	
4:3:1:4:3	1,586	19.9%	
4:3:1:3:3:1	1,659	20.8%	
4:3:1:0:3:1	1,665	20.9%	
4:3:1:4:3:1	1,571	19.7%	

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	10,416	
	Total	Percent
≥3 doses DTaP	7,672	73.7%
≥4 doses DTaP	3,587	34.4%
≥3 doses Polio	7,574	72.7%
≥1 dose MMR	5,511	52.9%
≥3 doses Hib	7,536	72.4%
≥1 dose Hib	10,304	98.9%
≥3 doses Hep B	7,567	72.6%
≥1 dose Varicella	5,472	52.5%
≥3 doses PCV	7,716	74.1%
≥4 doses PCV	4,469	42.9%
4:3:1	3,432	32.9%
4:3:1:3	3,448	33.1%
4:3:1:4	3,366	32.3%
4:3:1:3:3	3,368	32.3%
4:3:1:0:3	3,376	32.4%
4:3:1:4:3	3,184	30.6%
4:3:1:3:3:1	3,344	32.1%
4:3:1:0:3:1	3,352	32.2%
4:3:1:4:3:1	3,162	30.4%
4:3:1:3:3:1:4	3,276	31.5%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total[^]	41,510	Female Total	20,008	Male Total	21,392
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	21,456	51.7%	11,287	56.4%	10,122	47.3%
2 HPV	12,850	31.0%	6,870	34.3%	5,954	27.8%
3 HPV	5,638	13.6%	3,218	16.1%	2,411	11.3%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	41,510	
	Total	Percent
≥1 dose Meningococcal	30,758	74.1%
≥1 Tdap	31,972	77.0%
≥1 Varicella	33,777	81.4%
≥2 Varicella	26,064	62.8%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	13,253	
	Total	Percent
≥2 dose Meningococcal	2,436	18.4%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	125,063	
	Total	Percent
≥1 dose Influenza in lifetime	87,740	70.2%
≥1 dose Influenza last flu season*	38,603	30.9%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

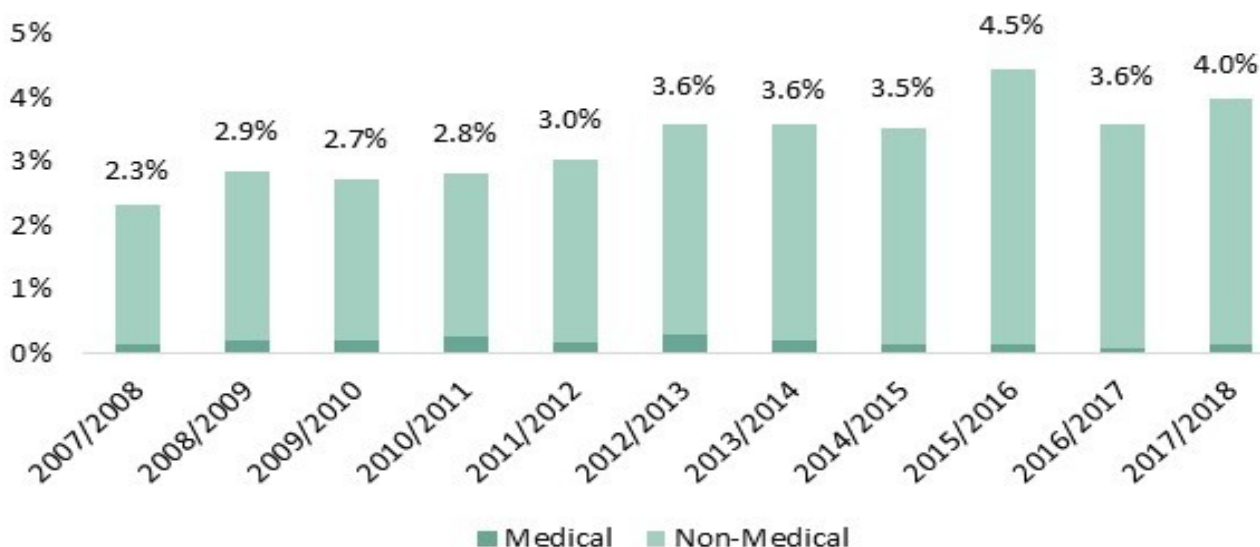
Adequately Immunized by School District 2017²

Davis School District		
	Adequately Immunized	Total Exemptions
Kindergarten School Entry	92.5%	4.1%
Second-Dose Measles (K-12)	96.9%	2.9%
7th Grade Entry	93.1%	4.5%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	75.6%	1.3%
Head Start Centers	95.9%	2.3%

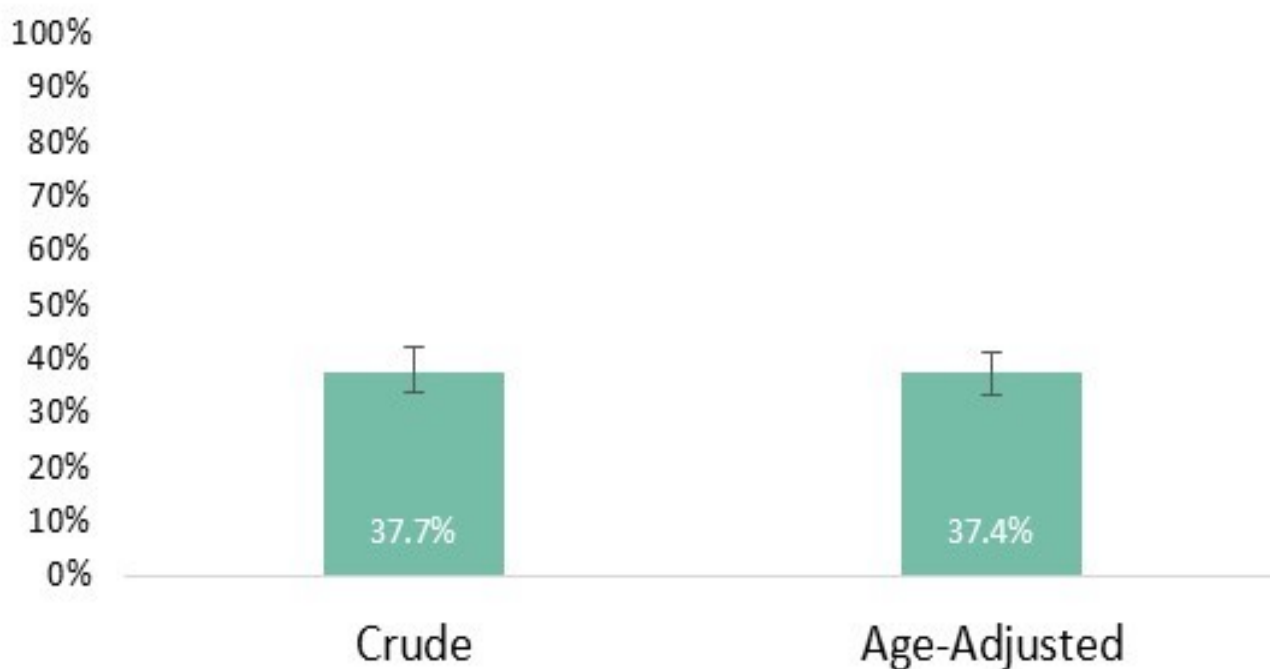
Kindergarten Exemptions by Type, 2007-2017²



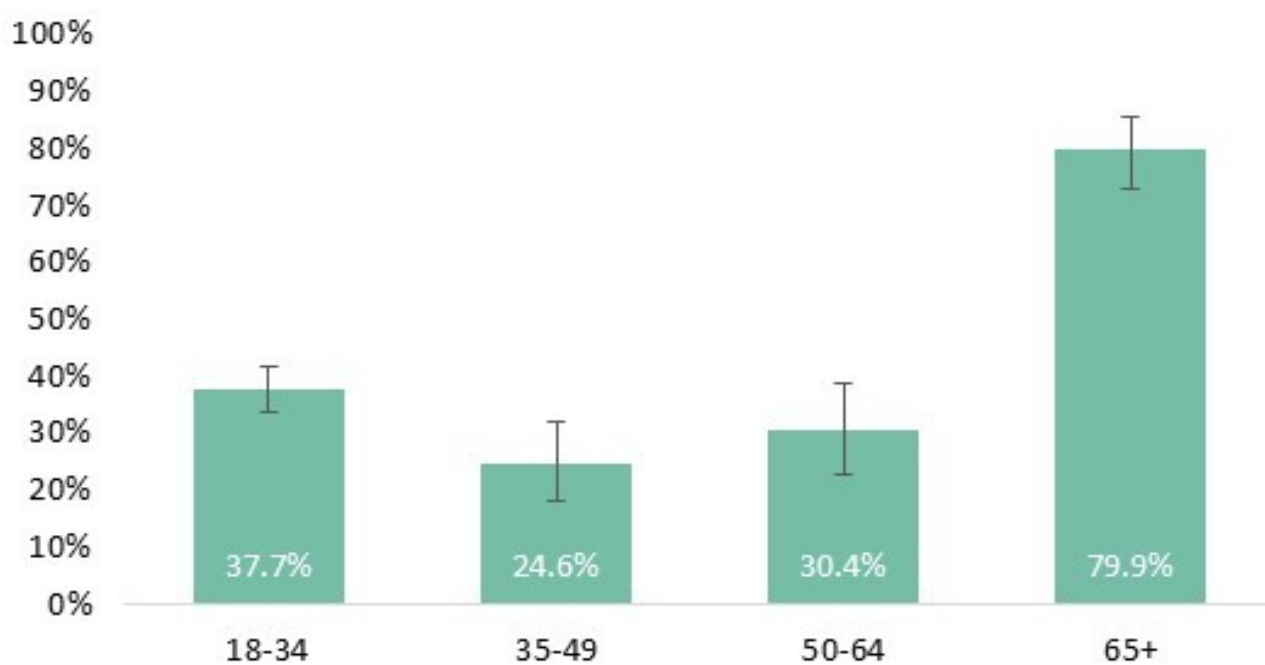
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	253,042	
	Total	Percent
≥1 dose Influenza last season*	68,514	27.1%
≥1 dose influenza in lifetime	149,198	59.0%
≥1 TDaP	114,477	45.2%
≥1 Varicella	23,677	9.4%
≥1 HPV	14,470	5.7%
≥1 Zoster**	4,667	1.8%
≥1 MMR	95,629	37.8%
≥1 PCV13	25,038	9.9%
≥1PPSV23	29,021	11.5%
≥1 Hep A	69,142	27.3%
≥1 Hep B	82,468	32.6%
≥1 Meningococcal	27,865	11.0%
≥1 HIB	44,029	17.4%

*Last flu season between 07/01/2016 and 6/30/2017. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

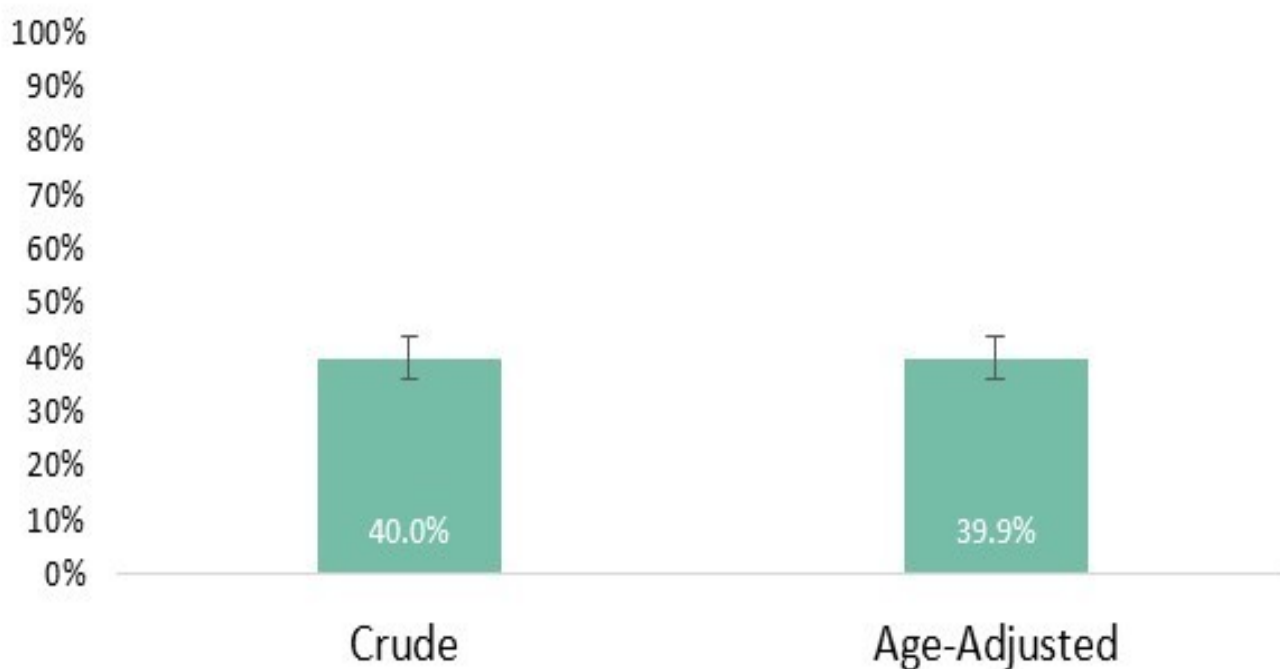
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



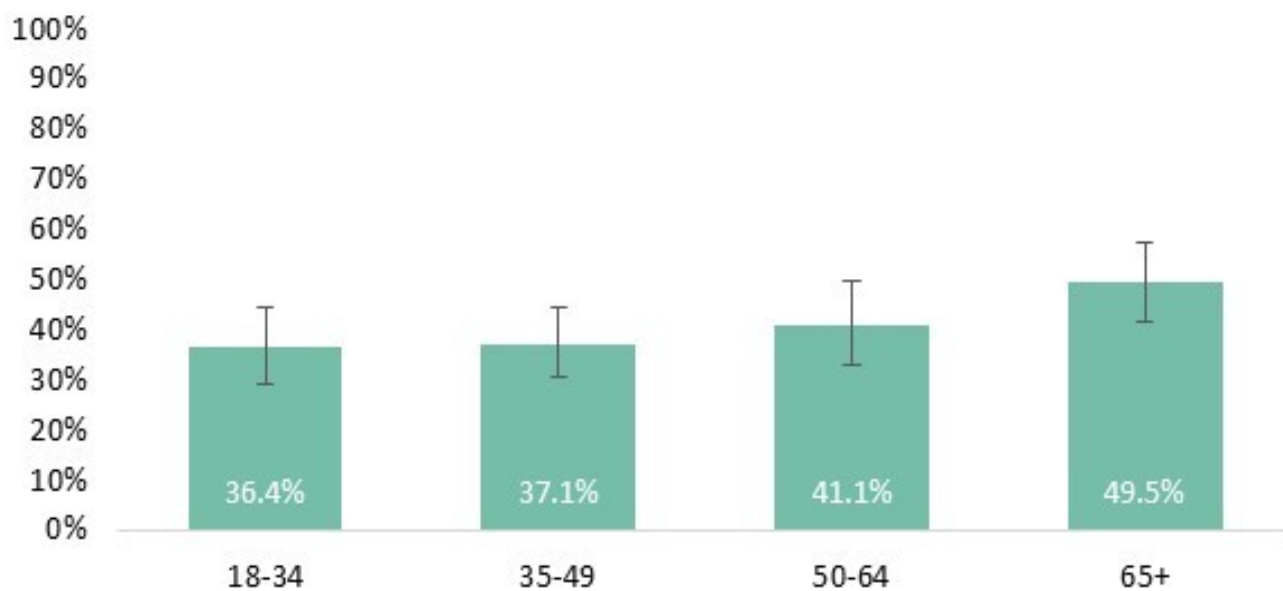
2017 Pneumococcal Vaccination (Ever Received) by Age³



2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	17,762	
	Total	Percent
≥3 doses DTaP	16,705	94.0%
≥4 doses DTaP	15,087	84.9%
≥3 doses Polio	16,506	92.9%
≥1 dose MMR	16,176	91.1%
≥3 doses Hib	16,331	91.9%
≥1 dose Hib	17,615	99.2%
≥3 doses Hep B	16,349	32.0%
Hep B Birth dose	14,694	82.7%
≥1 dose Varicella	16,039	90.3%
≥3 doses PCV	16,500	92.9%
≥4 doses PCV	14,775	83.2%
≥2 doses Hep A	13,565	76.4%
≥1 dose Rotavirus	16,473	92.7%
4:3:1	14,896	83.9%
4:3:1:3	14,802	83.3%
4:3:1:4	14,254	80.2%
4:3:1:3:3	14,472	81.5%
4:3:1:0:3:1	14,491	81.6%
4:3:1:3:3:1	14,407	81.1%
4:3:1:4:3:1	11,499	64.7%
4:3:1:0:3:1:4	13,912	78.3%
4:3:1:3:3:1:4	13,880	78.1%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	4,789	
	Total	Percent
≥1 dose DTaP	4,751	99.2%
≥1 dose Polio	4,715	98.5%
≥1 dose Hib	4,733	98.8%
≥1 dose Hep B	4,725	98.7%
≥2 doses Hep B	4,392	91.7%
≥1 dose PCV	4,728	98.7%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	7,083	
	Total	Percent
≥2 doses DTaP	5,054	71.4%
≥2 doses Polio	5,020	70.9%
≥2 doses Hib	5,036	71.1%
≥2 doses Hep B	6,576	92.8%
≥2 doses PCV	5,002	70.6%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	16,410	
	Total	Percent
≥3 doses DTaP	10,883	66.3%
≥2 doses Polio	13,882	84.6%
≥1 dose MMR	3,850	23.5%
≥2 doses Hib	13,911	84.8%
≥3 doses Hib	9,861	60.1%
≥2 doses Hep B	15,580	94.9%
≥3 doses Hep B	12,195	74.3%
≥1 dose Varicella	3,378	20.6%
≥3 doses PCV	10,739	65.4%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	24,424	
	Total	Percent
≥3 doses DTaP	18,278	74.8%
≥4 doses DTaP	6,506	26.6%
≥3 doses Polio	18,090	74.1%
≥1 dose MMR	10,734	43.9%
≥3 doses Hib	17,010	69.6%
≥1 dose Hib	24,215	99.1%
≥3 doses Hep B	19,554	80.1%
≥1 dose Varicella	10,145	41.5%
≥3 doses PCV	18,071	74.0%
>4 dose PCV	8,437	34.5%
4:3:1	6,362	26.0%
4:3:1:3	6,346	26.0%
4:3:1:4	6,213	25.4%
4:3:1:3:3	6,329	25.9%
4:3:1:0:3	6,345	26.0%
4:3:1:4:3	5,307	21.7%
4:3:1:3:3:1	6,300	25.8%
4:3:1:0:3:1	6,317	25.9%
4:3:1:4:3:1	5,283	21.6%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2017		
Total	31,795	
	Total	Percent
≥3 doses DTaP	25,275	79.5%
≥4 doses DTaP	12,535	39.4%
≥3 doses Polio	24,996	78.6%
≥1 dose MMR	17,333	54.5%
≥3 doses Hib	23,800	74.9%
≥1 dose Hib	31,535	99.2%
≥3 doses Hep B	26,495	83.3%
≥1 dose Varicella	16,692	52.5%
≥3 doses PCV	24,981	78.6%
≥4 doses PCV	14,482	45.5%
4:3:1	12,275	38.6%
4:3:1:3	12,420	39.1%
4:3:1:4	12,136	38.2%
4:3:1:3:3	12,279	38.6%
4:3:1:0:3	12,308	38.7%
4:3:1:4:3	10,039	31.6%
4:3:1:3:3:1	12,206	38.4%
4:3:1:0:3:1	12,234	38.5%
4:3:1:4:3:1	9,989	31.4%
4:3:1:3:3:1:4	11,962	37.6%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	138,077	Female Total	67,327	Male Total	70,134
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	75,708	54.8%	38,610	57.3%	36,791	52.5%
2 HPV	50,722	36.7%	26,598	39.5%	23,957	34.2%
3 HPV	25,962	18.8%	14,230	21.1%	11,656	16.6%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	138,077	
	Total	Percent
≥1 dose Meningococcal	96,856	70.1%
≥1 Tdap	100,029	72.4%
≥1 Varicella	123,202	89.2%
≥2 Varicella	100,873	73.1%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	45,395	
	Total	Percent
≥2 dose Meningococcal	10,399	22.9%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	398,128	
	Total	Percent
≥1 dose Influenza in lifetime	284,691	71.5%
≥1 dose Influenza last flu season*	119,775	30.1%

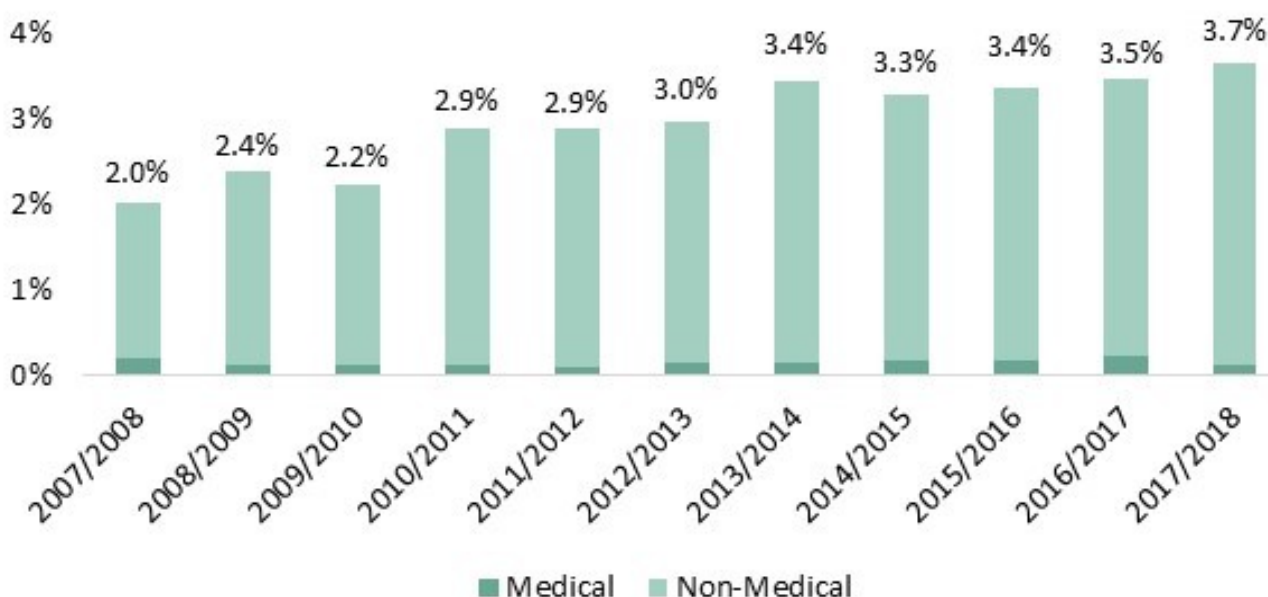
[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

Adequately Immunized by School District 2017²

	Canyons		Granite		Jordan		Murray		Salt Lake	
	Adequate Immun	Total Exempt	Adequate Immun	Total Exempt	Adequate Immun	Total Exempt	Adequate Immun	Total Exempt	Adequate Immun	Total Exempt
Kindergarten School Entry	93.0%	4.0%	93.7%	2.6%	92.5%	4.8%	87.8%	3.9%	95.6%	2.6%
Second-Dose Measles (K-12)	96.6%	3.2%	98.2%	1.6%	97.0%	2.9%	97.3%	2.2%	98.1%	1.7%
7th Grade Entry	94.4%	5.1%	97.1%	2.2%	95.5%	3.6%	96.0%	2.9%	94.7%	2.5%

Immunized for Child Care 2016²

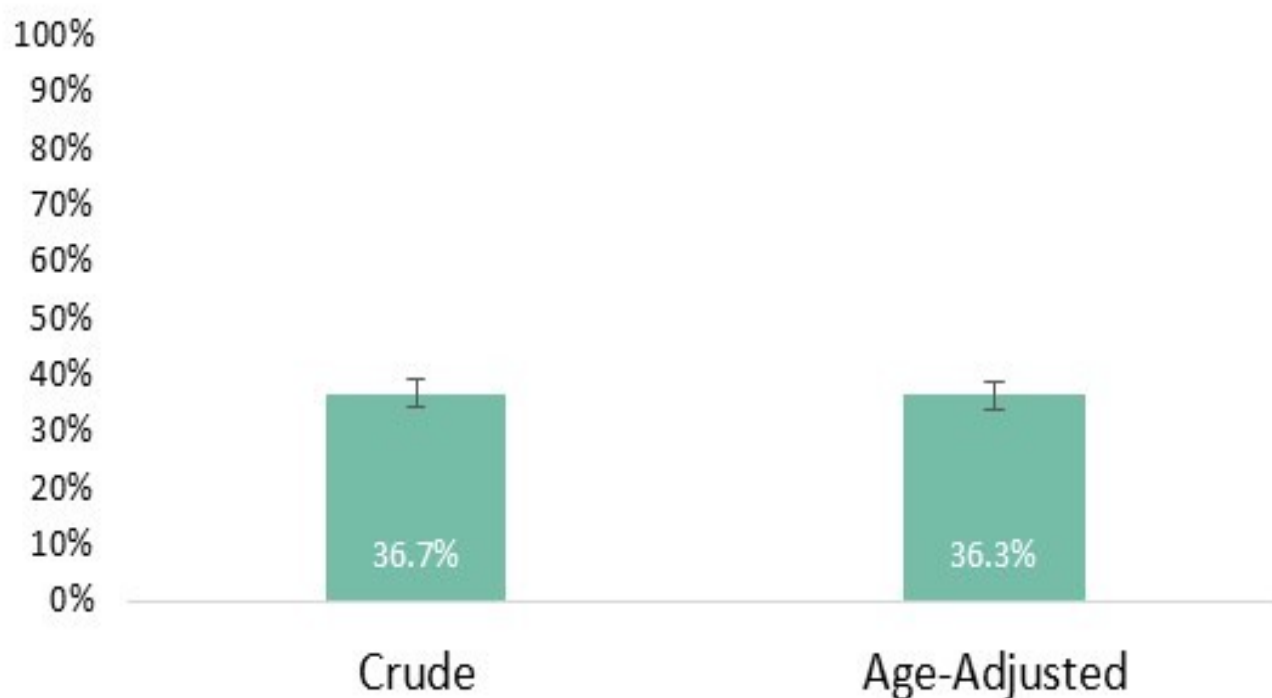
	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	95.2%	2.0%
Head Start Centers	99.1%	0.9%

Kindergarten Exemptions by Type, 2007-2017²

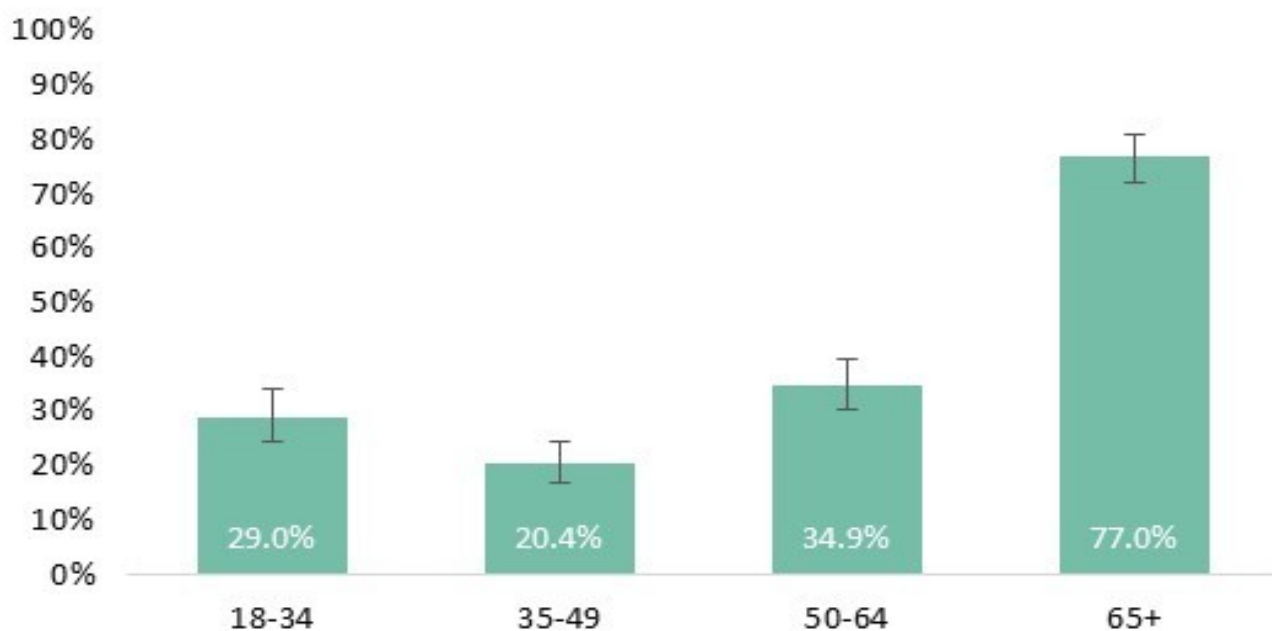
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	902,085	
	Total	Percent
≥1 dose Influenza last season*	227,439	25.2%
≥1 dose influenza in lifetime	543,054	60.2%
≥1 Tdap	421,559	46.7%
≥1 Varicella	116,328	12.9%
≥1 HPV	65,501	7.3%
≥1 Zoster**	15,721	1.7%
≥1 MMR	335,704	37.2%
≥1 PCV13	91,103	10.1%
≥1PPSV23	113,244	12.6%
≥1 Hep A	288,368	32.0%
≥1 Hep B	321,692	35.7%
≥1 Meningococcal	110,028	12.2%
≥1 HIB	162,686	18.0%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

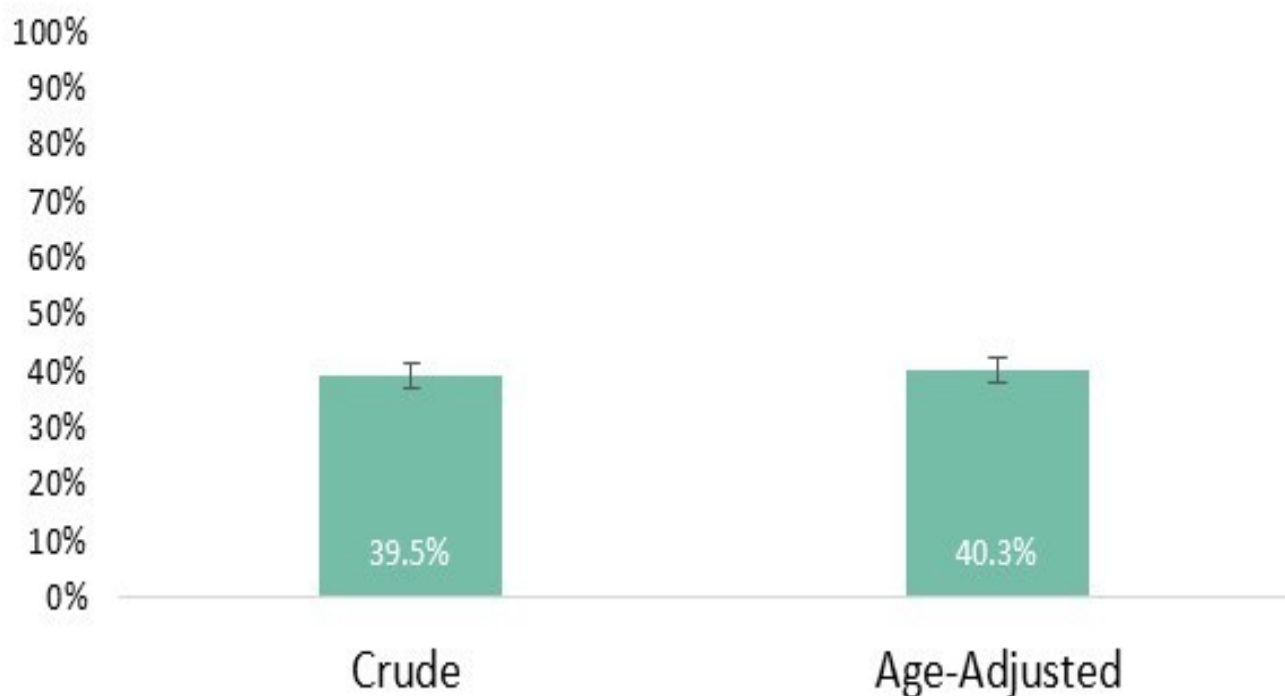
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



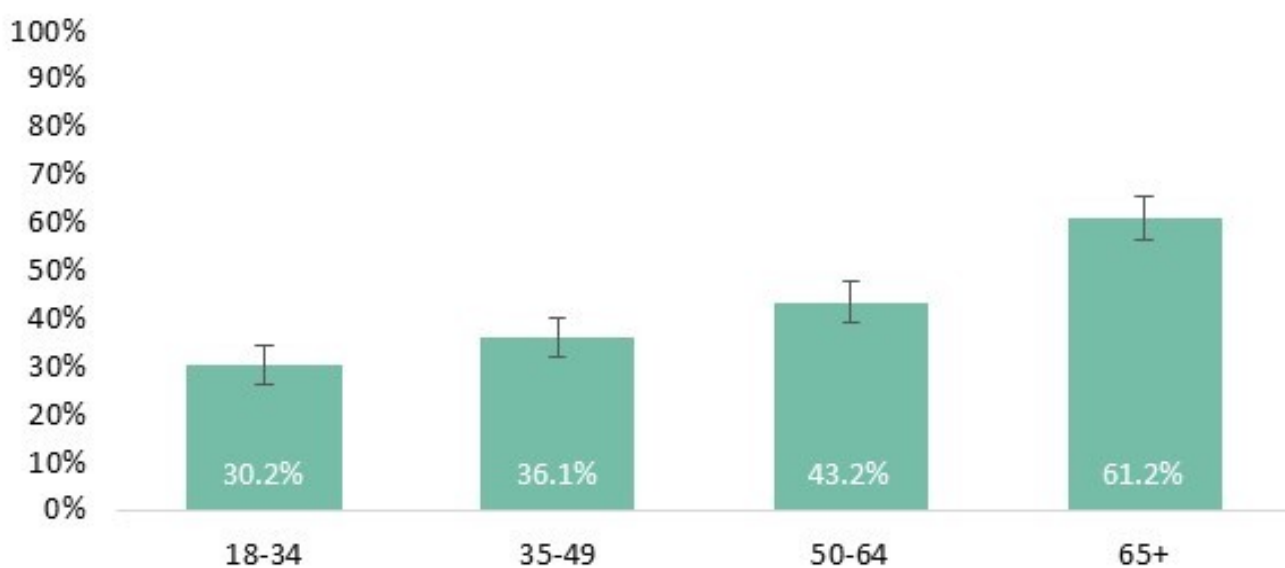
2017 Pneumococcal Vaccination (Ever Received) by Age³



2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2017		
Total	251	
	Total	Percent
≥3 doses DTaP	218	86.9%
≥4 doses DTaP	169	67.3%
≥3 doses Polio	217	86.5%
≥1 dose MMR	213	84.9%
≥3 doses Hib	202	80.5%
≥1 dose Hib	248	98.8%
≥3 doses Hep B	228	90.8%
Hep B Birth dose	216	86.1%
≥1 dose Varicella	208	82.9%
≥3 doses PCV	216	86.1%
≥4 doses PCV	162	64.5%
≥2 doses Hep A	142	56.6%
≥1 dose Rotavirus	222	88.4%
4:3:1	167	66.5%
4:3:1:3	165	65.7%
4:3:1:4	150	59.8%
4:3:1:3:3	163	64.9%
4:3:1:0:3:1	160	63.7%
4:3:1:3:3:1	159	63.3%
4:3:1:4:3:1	118	47.0%
4:3:1:0:3:1:4	145	57.8%
4:3:1:3:3:1:4	144	57.4%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	52	
	Total	Percent
≥1 dose DTaP	52	100%
≥1 dose Polio	52	100%
≥1 dose Hib	52	100%
≥1 dose Hep B	52	100%
≥2 doses Hep B	48	92.3%
≥1 dose PCV	52	100%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	74	
	Total	Percent
≥2 doses DTaP	49	66.2%
≥2 doses Polio	48	64.9%
≥2 doses Hib	49	66.2%
≥2 doses Hep B	70	94.6%
≥2 doses PCV	47	63.5%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	178	
	Total	Percent
≥3 doses DTaP	90	50.6%
≥2 doses Polio	139	78.1%
≥1 dose MMR	28	15.7%
≥2 doses Hib	139	78.1%
≥3 doses Hib	72	40.4%
≥2 doses Hep B	169	94.9%
≥3 doses Hep B	109	61.2%
≥1 dose Varicella	26	14.6%
≥3 doses PCV	88	49.4%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	262	
	Total	Percent
≥3 doses DTaP	162	61.8%
≥4 doses DTaP	44	16.8%
≥3 doses Polio	162	61.8%
≥1 dose MMR	95	36.3%
≥3 doses Hib	141	53.8%
≥1 dose Hib	261	99.6%
≥3 doses Hep B	186	71.0%
≥1 dose Varicella	93	35.5%
≥3 doses PCV	161	61.5%
>4 dose PCV	61	23.3%
4:3:1	42	16.0%
4:3:1:3	42	16.0%
4:3:1:4	40	15.3%
4:3:1:3:3	45	17.2%
4:3:1:0:3	45	17.2%
4:3:1:4:3	31	11.8%
4:3:1:3:3:1	44	16.8%
4:3:1:0:3:1	44	16.8%
4:3:1:4:3:1	31	11.8%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	351	
	Total	Percent
≥3 doses DTaP	233	66.4%
≥4 doses DTaP	101	28.8%
≥3 doses Polio	232	66.1%
≥1 dose MMR	169	48.1%
≥3 doses Hib	210	59.8%
≥1 dose Hib	350	99.7%
≥3 doses Hep B	260	74.1%
≥1 dose Varicella	166	47.3%
≥3 doses PCV	230	65.5%
≥4 doses PCV	115	32.8%
4:3:1	98	27.9%
4:3:1:3	100	28.5%
4:3:1:4	91	25.9%
4:3:1:3:3	100	28.5%
4:3:1:0:3	100	28.5%
4:3:1:4:3	70	19.9%
4:3:1:3:3:1	98	27.9%
4:3:1:0:3:1	98	27.9%
4:3:1:4:3:1	70	19.9%
4:3:1:3:3:1:4	90	25.6%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	2,149	Female Total	1,066	Male Total	1,077
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	1,171	54.5%	622	58.3%	548	50.9%
2 HPV	816	38.0%	456	42.8%	360	33.4%
3 HPV	400	18.6%	172	16.0%	288	21.4%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	2,149	
	Total	Percent
≥1 dose Meningococcal	1,480	68.9%
≥1 Tdap	1,586	73.8%
≥1 Varicella	1,915	89.1%
≥2 Varicella	1,654	77.0%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	676	
	Total	Percent
≥2 dose Meningococcal	182	26.9%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	5,871	
	Total	Percent
≥1 dose Influenza in lifetime	3,538	60.3%
≥1 dose Influenza last flu season*	1,250	21.3%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

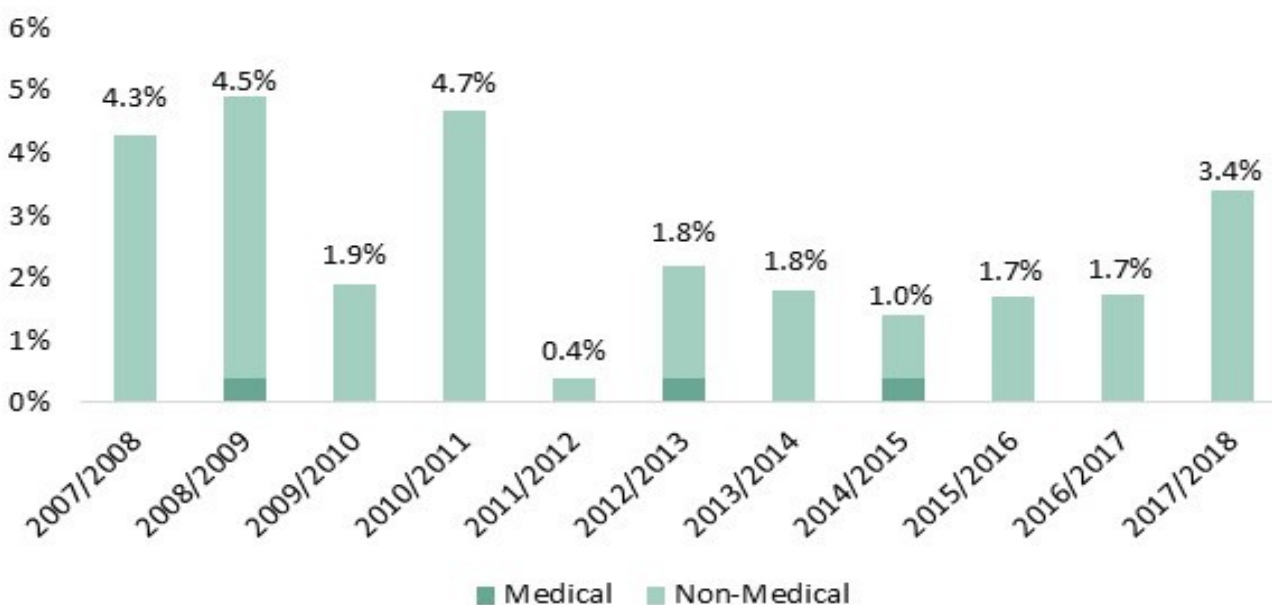
Adequately Immunized by School District 2016²

San Juan		
	Adequately Immunized	Total Exemptions
Kindergarten School Entry	89.3%	3.4%
Second-Dose Measles (K-12)	96.0%	2.6%
7th Grade Entry	73.8%	2.4%

Immunized for Child Care 2016²

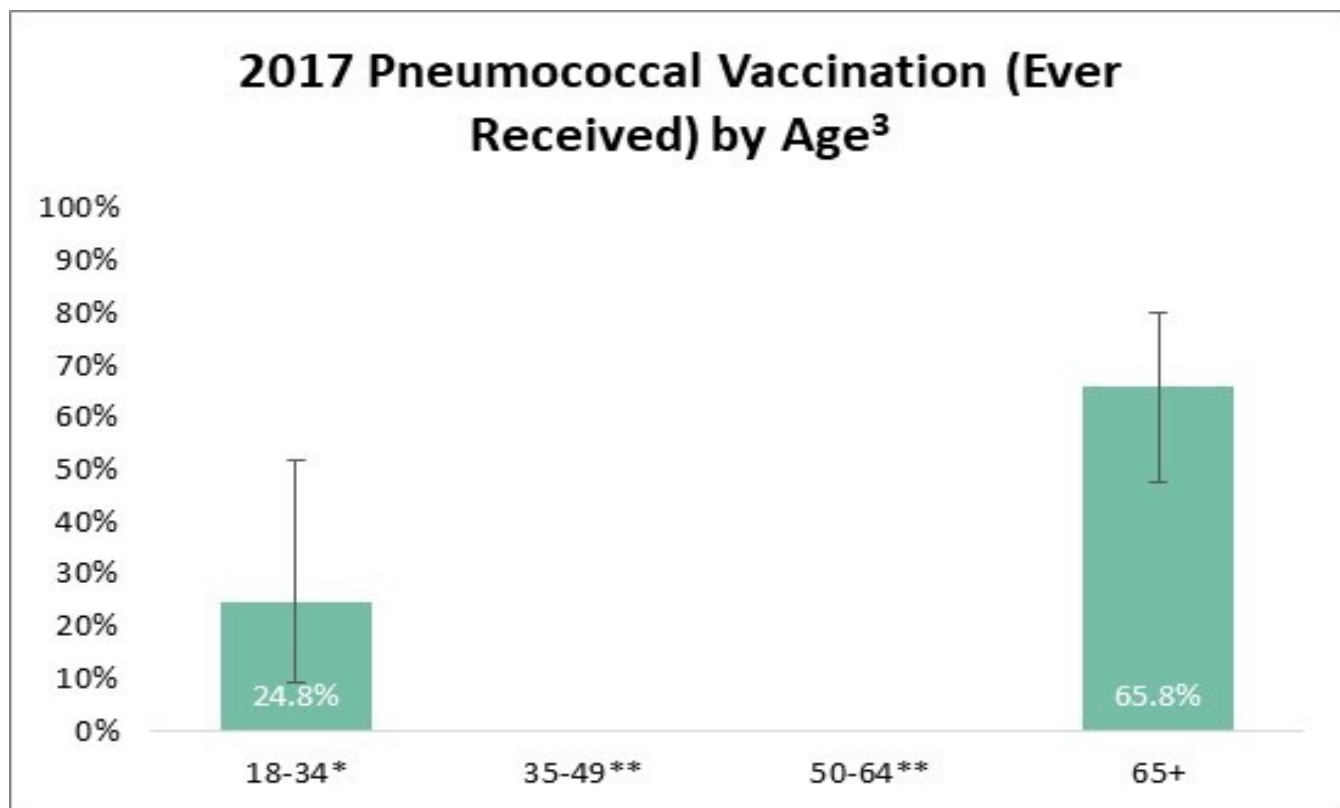
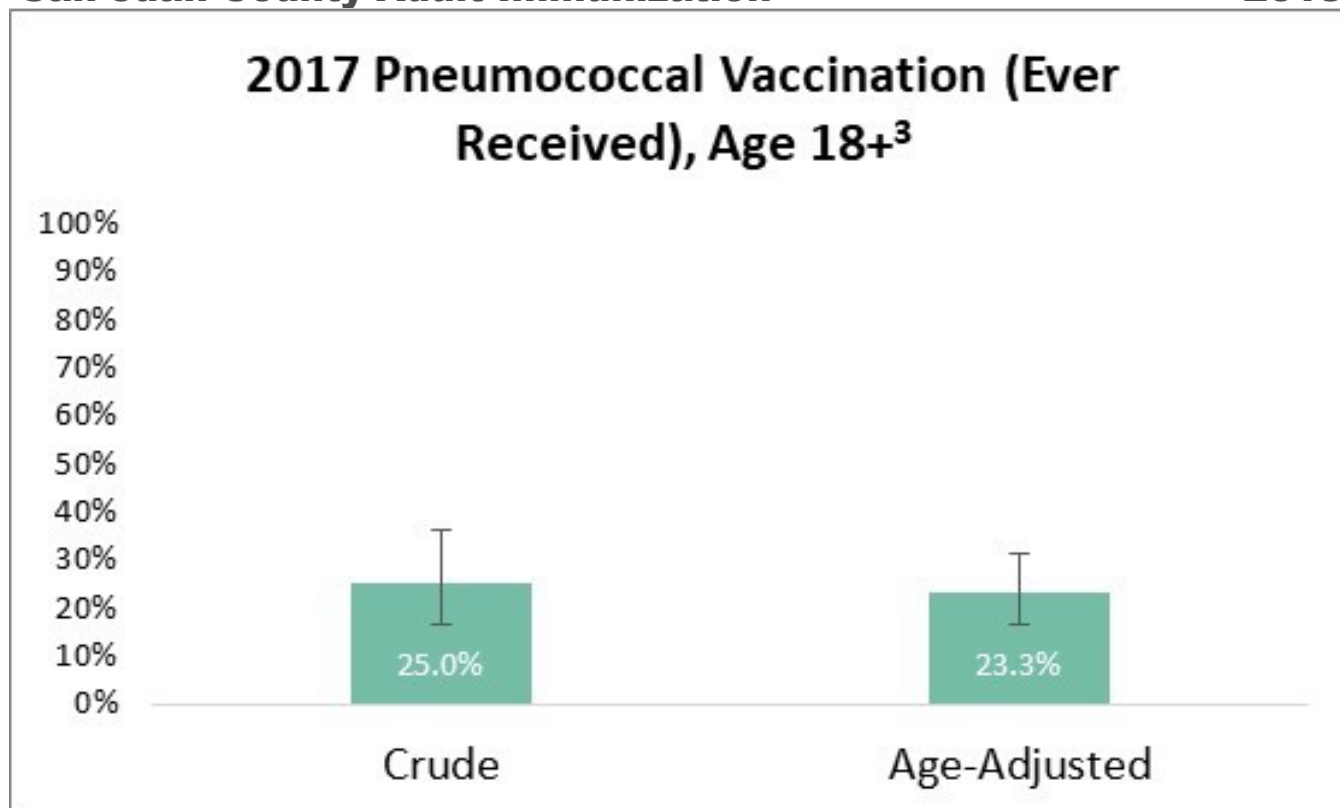
	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	N/A	N/A
Head Start Centers	N/A	N/A

Kindergarten Exemptions by Type, 2007-2017²



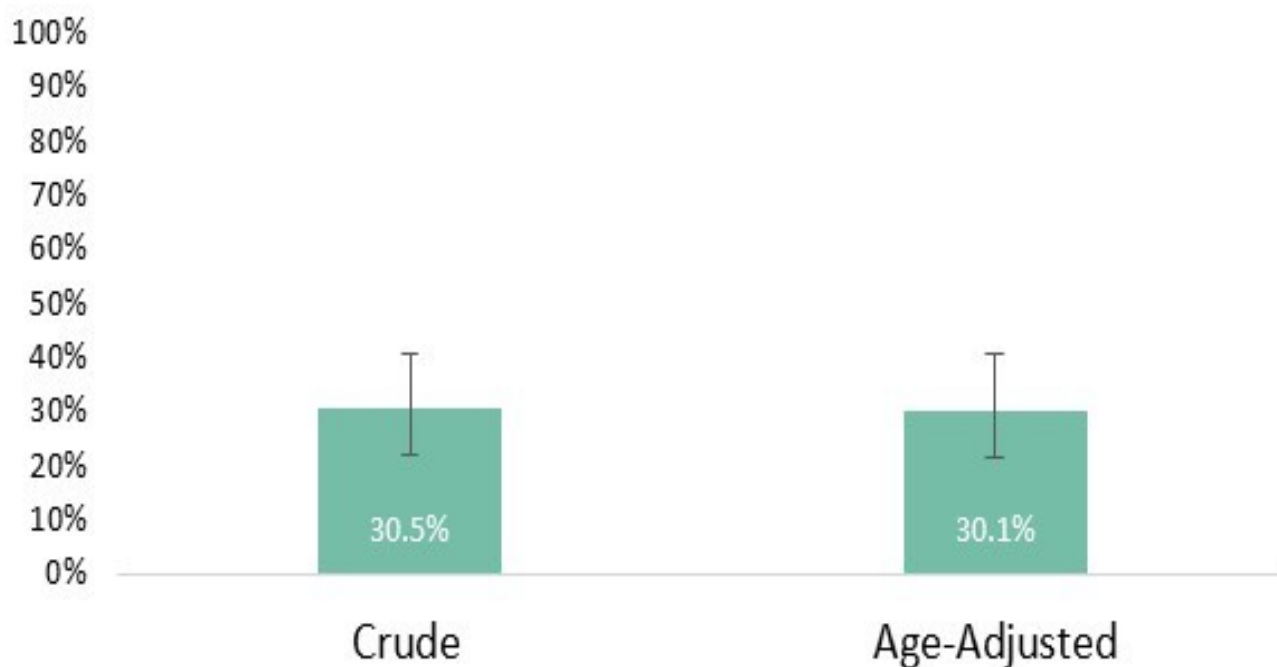
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	10,592	
	Total	Percent
≥1 dose Influenza last season*	2,351	22.2%
≥1 dose influenza in lifetime	7,786	73.5%
≥1 TDaP	5,432	51.3%
≥1 Varicella	1,151	10.9%
≥1 HPV	1,057	10.0%
≥1 Zoster**	115	1.1%
≥1 MMR	3,132	29.6%
≥1 PCV13	827	7.8%
≥1PPSV23	1,724	16.3%
≥1 Hep A	3,867	36.5%
≥1 Hep B	4,319	40.8%
≥1 Meningococcal	1,683	15.9%
≥1 HIB	2,294	21.7%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix pver Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

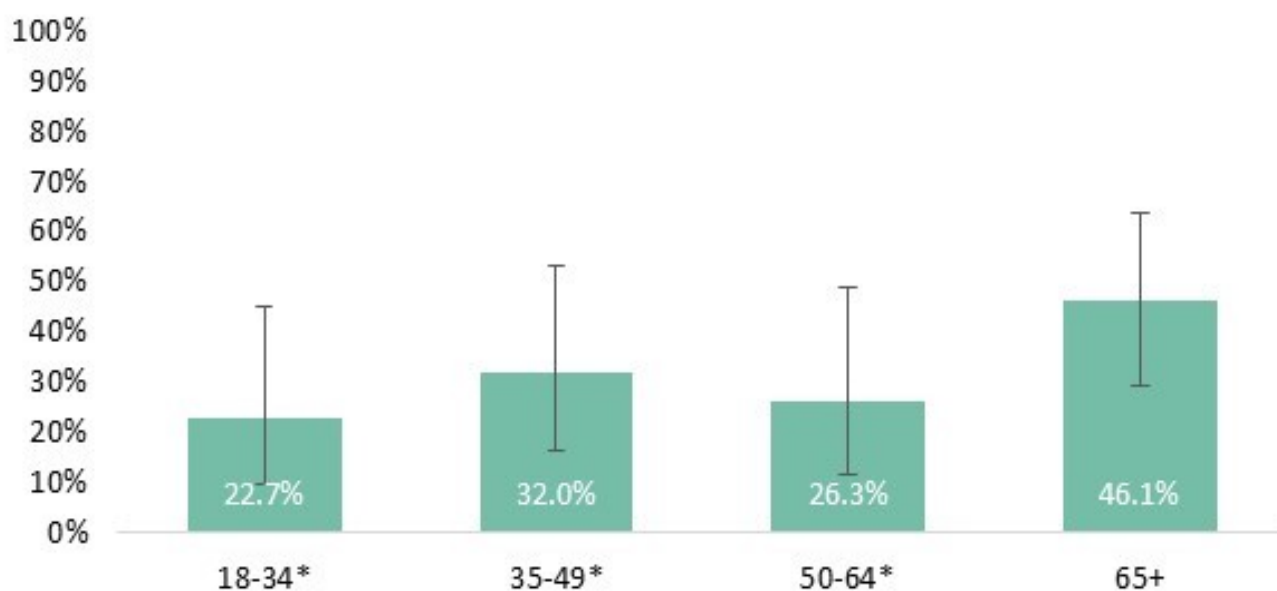


Source: BRFSS, Utah, 2017. Crude and Age-adjusted Rates. *Use caution in interpreting, the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by UDOH standards. **The estimate has been suppressed because 1) The relative standard error is greater than 50% or the relative standard error can't be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. 2) the observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.

2017 Influenza Vaccination (Within the Past Year), Age 18+³

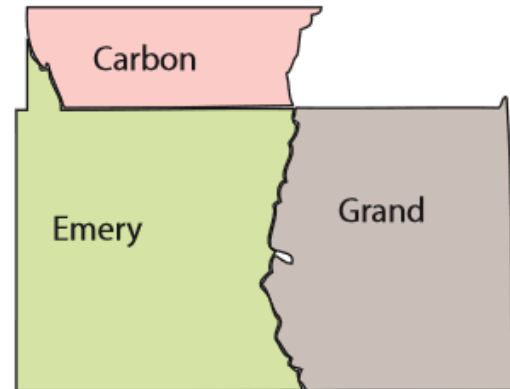


2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	421	
	Total	Percent
≥3 doses DTaP	283	67.2%
≥4 doses DTaP	183	43.5%
≥3 doses Polio	252	59.9%
≥1 dose MMR	338	80.3%
≥3 doses Hib	259	61.5%
≥1 dose Hib	387	91.9%
≥3 doses Hep B	261	62.0%
Hep B Birth dose	353	83.8%
≥1 dose Varicella	330	78.4%
≥3 doses PCV	264	62.7%
≥4 doses PCV	180	42.8%
≥2 doses Hep A	209	49.6%
≥1 dose Rotavirus	249	59.1%
4:3:1	179	42.5%
4:3:1:3	176	41.8%
4:3:1:4	160	38.0%
4:3:1:3:3	167	39.7%
4:3:1:0:3:1	167	39.7%
4:3:1:3:3:1	164	39.0%
4:3:1:4:3:1	133	31.6%
4:3:1:0:3:1:4	151	35.9%
4:3:1:3:3:1:4	149	35.4%



≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	132	
	Total	Percent
≥1 dose DTaP	130	98.5%
≥1 dose Polio	131	99.2%
≥1 dose Hib	130	98.5%
≥1 dose Hep B	132	100%
≥2 doses Hep B	116	87.9%
≥1 dose PCV	130	98.5%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	202	
	Total	Percent
≥2 doses DTaP	124	61.4%
≥2 doses Polio	123	60.9%
≥2 doses Hib	122	60.4%
≥2 doses Hep B	182	90.1%
≥2 doses PCV	121	59.9%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	406	
	Total	Percent
≥3 doses DTaP	204	50.2%
≥2 doses Polio	297	73.2%
≥1 dose MMR	84	20.7%
≥2 doses Hib	296	72.9%
≥3 doses Hib	152	37.4%
≥2 doses Hep B	369	90.9%
≥3 doses Hep B	243	59.9%
≥1 dose Varicella	83	20.4%
≥3 doses PCV	207	51.0%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	583	
	Total	Percent
≥3 doses DTaP	336	57.6%
≥4 doses DTaP	102	17.5%
≥3 doses Polio	323	55.4%
≥1 dose MMR	226	38.8%
≥3 doses Hib	276	47.3%
≥1 dose Hib	572	98.1%
≥3 doses Hep B	373	64.0%
≥1 dose Varicella	224	38.4%
≥3 doses PCV	335	57.5%
>4 dose PCV	144	24.7%
4:3:1	98	16.8%
4:3:1:3	98	16.8%
4:3:1:4	86	14.8%
4:3:1:3:3	94	16.1%
4:3:1:0:3	94	16.1%
4:3:1:4:3	59	10.1%
4:3:1:3:3:1	93	16.0%
4:3:1:0:3:1	93	16.0%
4:3:1:4:3:1	58	9.9%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	743	
	Total	Percent
≥3 doses DTaP	452	60.8%
≥4 doses DTaP	180	24.2%
≥3 doses Polio	428	57.6%
≥1 dose MMR	348	46.8%
≥3 doses Hib	381	51.3%
≥1 dose Hib	720	96.9%
≥3 doses Hep B	479	64.5%
≥1 dose Varicella	343	46.2%
≥3 doses PCV	448	60.3%
≥4 doses PCV	218	29.3%
4:3:1	175	23.6%
4:3:1:3	176	23.7%
4:3:1:4	159	21.4%
4:3:1:3:3	167	22.5%
4:3:1:0:3	168	22.6%
4:3:1:4:3	118	15.9%
4:3:1:3:3:1	165	22.2%
4:3:1:0:3:1	166	22.3%
4:3:1:4:3:1	117	15.7%
4:3:1:3:3:1:4	149	20.1%

12–17 Years of Age ⁵							
Children in USIIS born between 07/02/2000 and 07/01/2006							
Total^		4,454	Female Total		2,201	Male Total	2,239
	Total	Total %	Female Total	Female %	Male Total	Male %	
1 HPV	1,318	29.6%	706	32.1%	609	27.2%	
2 HPV	632	14.2%	372	16.9%	259	11.6%	
3 HPV	279	6.3%	174	7.9%	104	4.6%	

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	4,454	
	Total	Percent
≥1 dose Meningococcal	2,101	47.2%
≥1 Tdap	2,655	59.6%
≥1 Varicella	3,743	84.0%
≥2 Varicella	2,098	47.1%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	1,487	
	Total	Percent
≥2 dose Meningococcal	39	2.6%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	11,775	
	Total	Percent
≥1 dose Influenza in lifetime	5,189	44.1%
≥1 dose Influenza last flu season*	1,801	15.3%

^Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

Adequately Immunized by School District 2016²

	Carbon		Emery		Grand	
	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	92.4%	2.1%	84.3%	6.9%	96.6%	3.4%
Second-Dose Measles (K-12)	98.0%	1.8%	95.1%	4.7%	95.4%	4.5%
7th Grade Entry	96.1%	2.6%	94.6%	4.9%	91.9%	8.1%

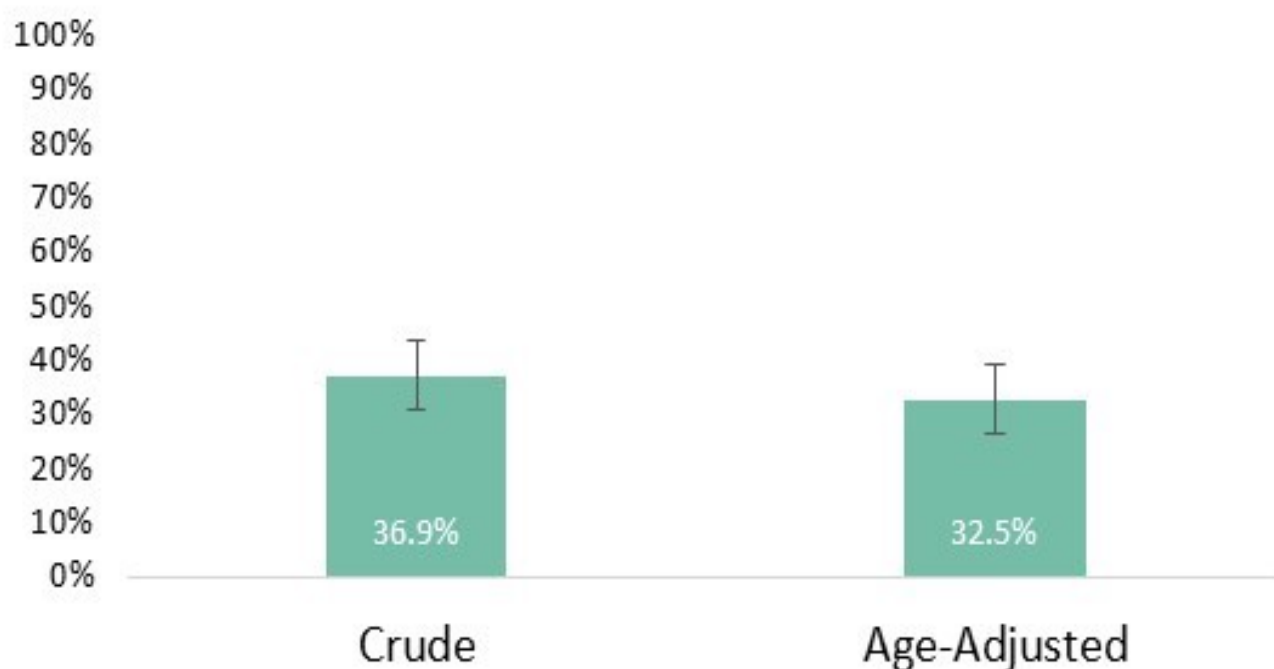
Immunized for Child Care 2016²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	97.9%	2.1%
Head Start Centers	88.0%	2.9%

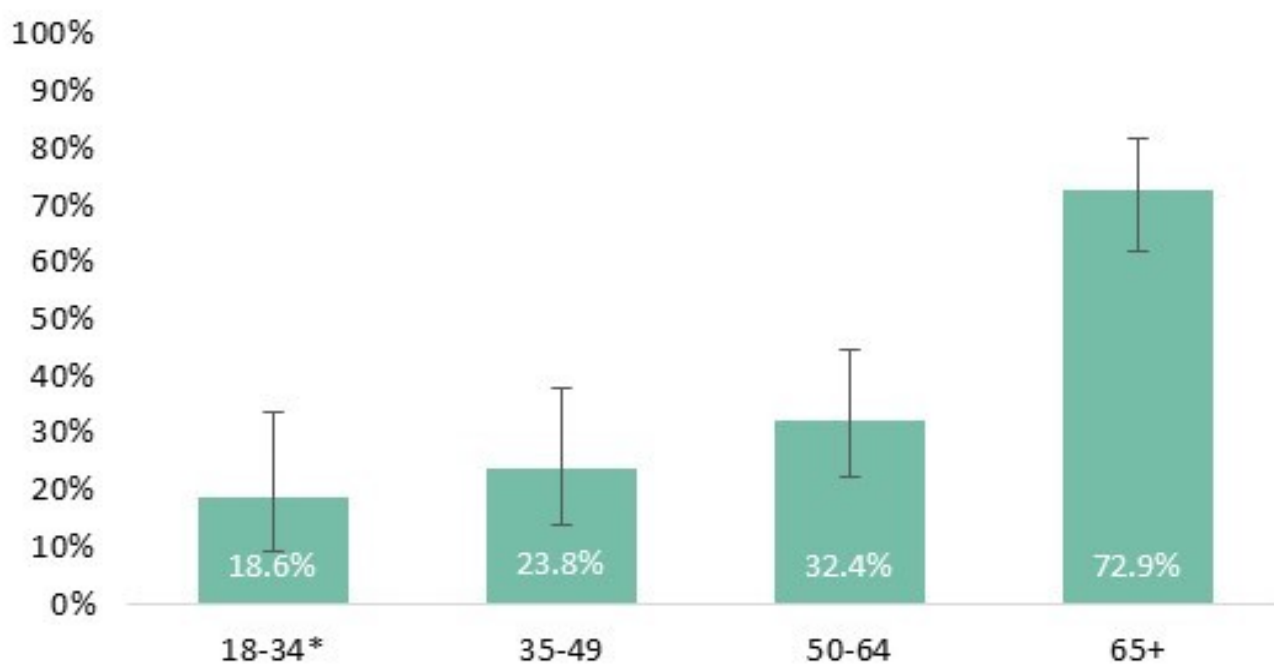
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	28,467	
	Total	Percent
≥1 dose Influenza last season*	6,531	22.9%
≥1 dose influenza in lifetime	18,226	64.0%
≥1 TDaP	8,327	29.3%
≥1 Varicella	1,980	7.0%
≥1 HPV	923	3.2%
≥1 Zoster**	327	1.1%
≥1 MMR	6,900	24.2%
≥1 PCV13	3,028	10.6%
≥1PPSV23	3,737	13.1%
≥1 Hep A	6,036	21.2%
≥1 Hep B	6,991	24.6%
≥1 Meningococcal	1,664	5.8%
≥1 HIB	4,199	14.8%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

2017 Pneumococcal Vaccination (Ever Received), Age 18+³

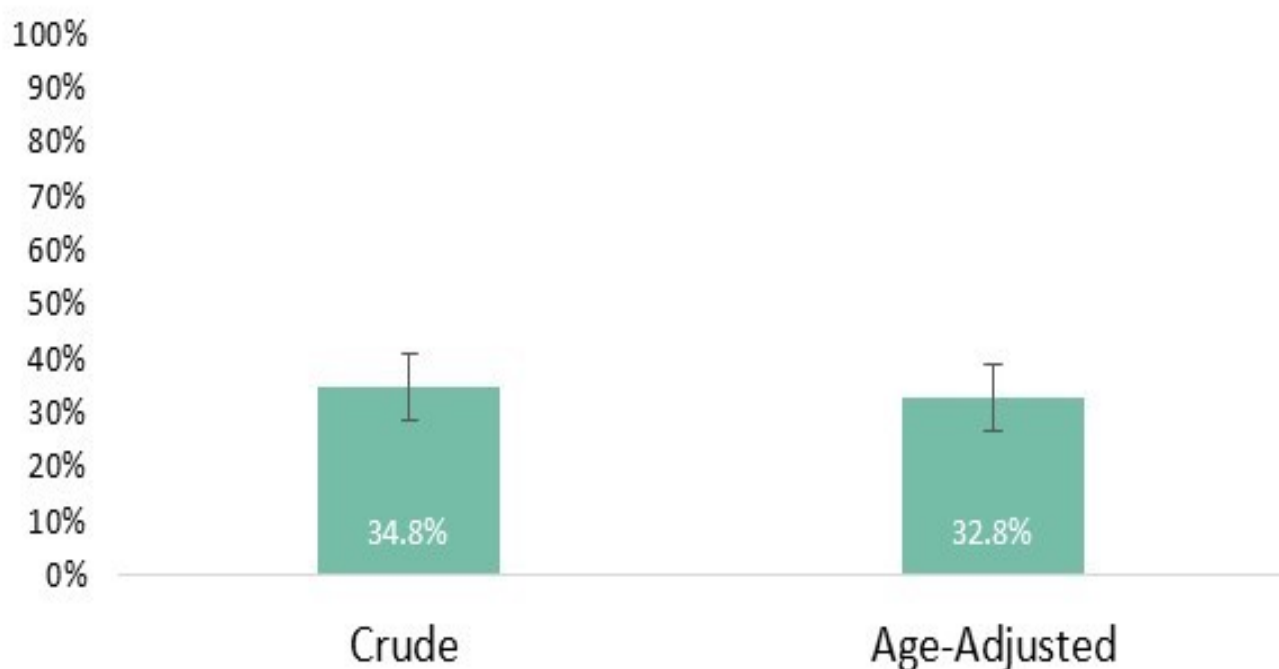


2017 Pneumococcal Vaccination (Ever Received) by Age³

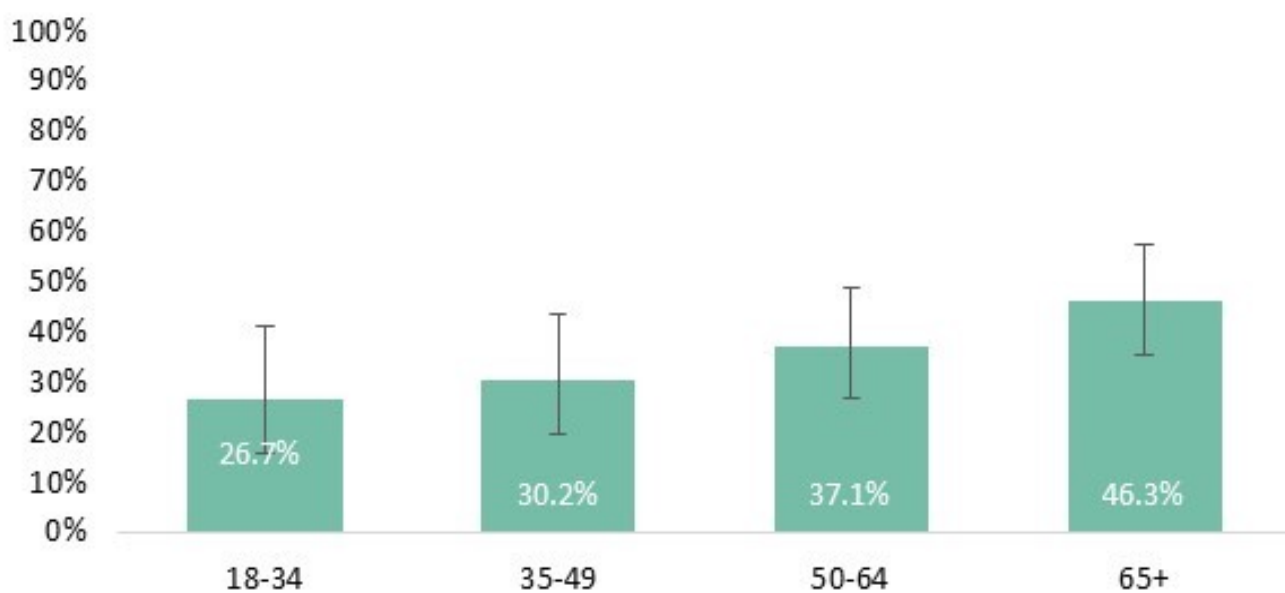


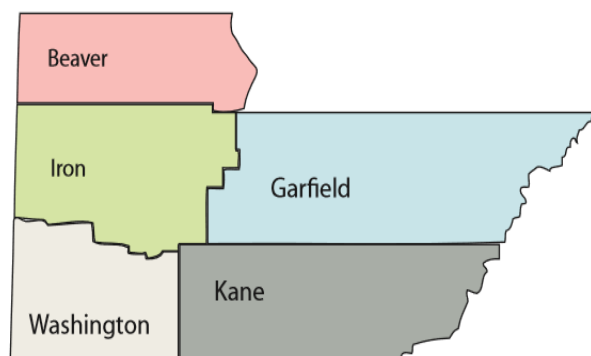
Source: BRFSS, Utah, 2017. Crude and Age-adjusted Rates. *Use caution in interpreting, the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by UDOH standards.

2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵			
Children in USIIS born between 07/02/2015 and 07/01/2017			
Total	3,139		
	Total	Percent	
≥3 doses DTaP	2,832	90.2%	
≥4 doses DTaP	2,327	74.1%	
≥3 doses Polio	2,756	87.8%	
≥1 dose MMR	2,688	85.6%	
≥3 doses Hib	2,599	82.8%	
≥1 dose Hib	3,081	98.2%	
≥3 doses Hep B	2,840	90.5%	
Hep B Birth dose	2,536	80.8%	
≥1 dose Varicella	2,671	85.1%	
≥3 doses PCV	2,769	88.2%	
≥4 doses PCV	2,289	72.9%	
≥2 doses Hep A	1,934	61.6%	
≥1 dose Rotavirus	2,752	87.7%	
4:3:1	2,262	72.1%	
4:3:1:3	2,235	71.2%	
4:3:1:4	2,096	66.8%	
4:3:1:3:3	2,214	70.5%	
4:3:1:0:3:1	2,223	70.8%	
4:3:1:3:3:1	2,198	70.0%	
4:3:1:4:3:1	769	24.5%	
4:3:1:0:3:1:4	2,067	65.8%	
4:3:1:3:3:1:4	2,055	65.5%	

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	842	
	Total	Percent
≥1 dose DTaP	836	99.3%
≥1 dose Polio	830	98.6%
≥1 dose Hib	822	97.6%
≥1 dose Hep B	834	99.0%
≥2 doses Hep B	777	92.3%
≥1 dose PCV	281	33.4%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	1,286	
	Total	Percent
≥2 doses DTaP	878	68.3%
≥2 doses Polio	873	67.9%
≥2 doses Hib	865	67.3%
≥2 doses Hep B	1,201	93.4%
≥2 doses PCV	854	66.4%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella . 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 HIB, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	2,998	
	Total	Percent
≥3 doses DTaP	1,804	60.2%
≥2 doses Polio	2,448	81.7%
≥1 dose MMR	542	18.1%
≥2 doses Hib	2,425	80.9%
≥3 doses Hib	920	30.7%
≥2 doses Hep B	2,832	94.5%
≥3 doses Hep B	2,232	74.4%
≥1 dose Varicella	571	19.0%
≥3 doses PCV	1,767	58.9%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	4,520	
	Total	Percent
≥3 doses DTaP	3,109	68.8%
≥4 doses DTaP	876	19.4%
≥3 doses Polio	3,047	67.4%
≥1 dose MMR	1,684	37.3%
≥3 doses Hib	2,047	45.3%
≥1 dose Hib	4,445	98.3%
≥3 doses Hep B	3,581	79.2%
≥1 dose Varicella	1,730	38.3%
≥3 doses PCV	3,048	67.4%
>4 dose PCV	1,450	32.1%
4:3:1	833	18.4%
4:3:1:3	819	18.1%
4:3:1:4	796	17.6%
4:3:1:3:3	819	18.1%
4:3:1:0:3	833	18.4%
4:3:1:4:3	300	6.6%
4:3:1:3:3:1	815	18.0%
4:3:1:0:3:1	829	18.3%
4:3:1:4:3:1	298	6.6%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	5,939	
	Total	Percent
≥3 doses DTaP	4,357	73.4%
≥4 doses DTaP	1,801	30.3%
≥3 doses Polio	4,265	71.8%
≥1 dose MMR	2,834	47.7%
≥3 doses Hib	3,180	53.5%
≥1 dose Hib	5,840	98.3%
≥3 doses Hep B	4,845	81.6%
≥1 dose Varicella	2,873	48.4%
≥3 doses PCV	4,260	71.7%
≥4 doses PCV	2,407	40.5%
4:3:1	1,712	28.8%
4:3:1:3	1,713	28.8%
4:3:1:4	1,637	27.6%
4:3:1:3:3	1,702	28.7%
4:3:1:0:3	1,272	29.1%
4:3:1:4:3	639	10.8%
4:3:1:3:3:1	1,696	28.6%
4:3:1:0:3:1	1,718	28.9%
4:3:1:4:3:1	633	10.7%
4:3:1:3:3:1:4	1,616	27.2%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	26,381	Female Total	12,771	Male Total	13,523
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	8,573	32.5%	4,638	36.3%	3,911	28.9%
2 HPV	5,004	19.0%	2,821	22.1%	2,173	16.1%
3 HPV	2,478	9.4%	1,493	11.7%	982	7.3%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	26,381	
	Total	Percent
≥1 dose Meningococcal	17,032	64.6%
≥1 Tdap	18,760	71.1%
≥1 Varicella	22,286	84.5%
≥2 Varicella	16,443	62.3%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	8,196	
	Total	Percent
≥2 dose Meningococcal	999	12.2%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	74,548	
	Total	Percent
≥1 dose Influenza in lifetime	38,038	51.0%
≥1 dose Influenza last flu season*	12,173	16.3%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

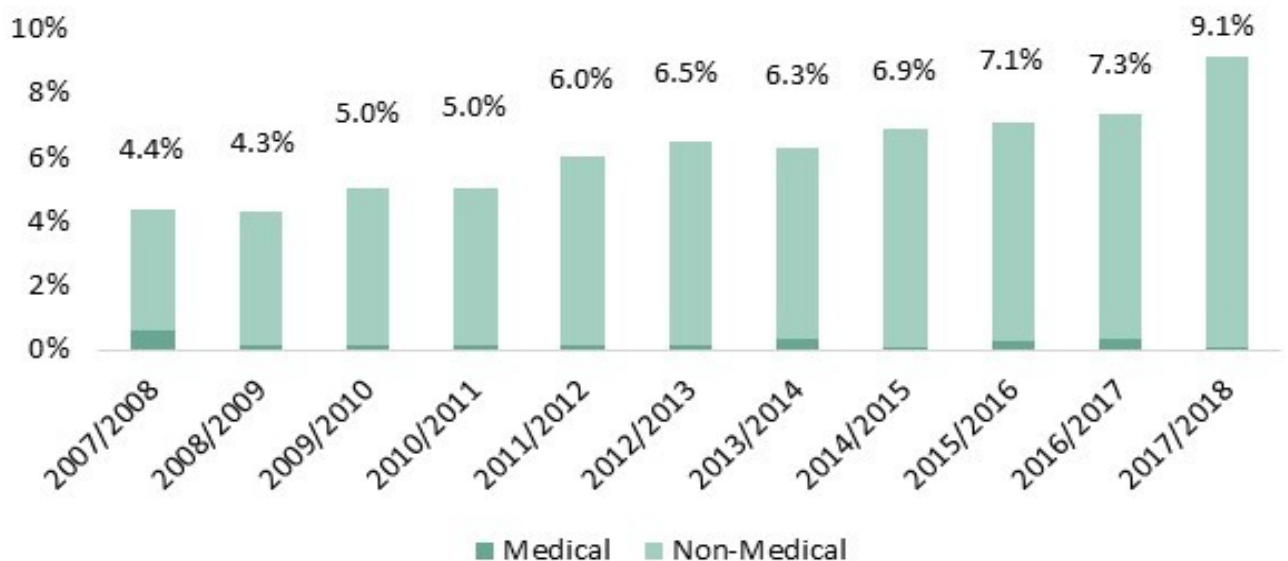
Adequately Immunized by School District 2017²

	Beaver		Garfield		Iron		Kane		Washington	
	Adequate Immune	Total Exempt	Adequate Immune	Total Exempt	Adequate Immune	Total Exempt	Adequate Immune	Total Exempt	Adequate Immune	Total Exempt
Kindergarten School Entry	95.0%	5.0%	91.8%	4.9%	90.2%	7.4%	82.5%	13.6%	88.2%	9.1%
Second-Dose Measles (K-12)	97.7%	2.3%	95.9%	4.1%	94.6%	5.4%	91.4%	8.4%	93.3%	6.6%
7th Grade Entry	98.4%	1.6%	94.6%	5.4%	92.4%	6.7%	91.2%	8.9%	88.6%	9.8%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	88.2%	3.1%
Head Start Centers	82.9%	4.5%

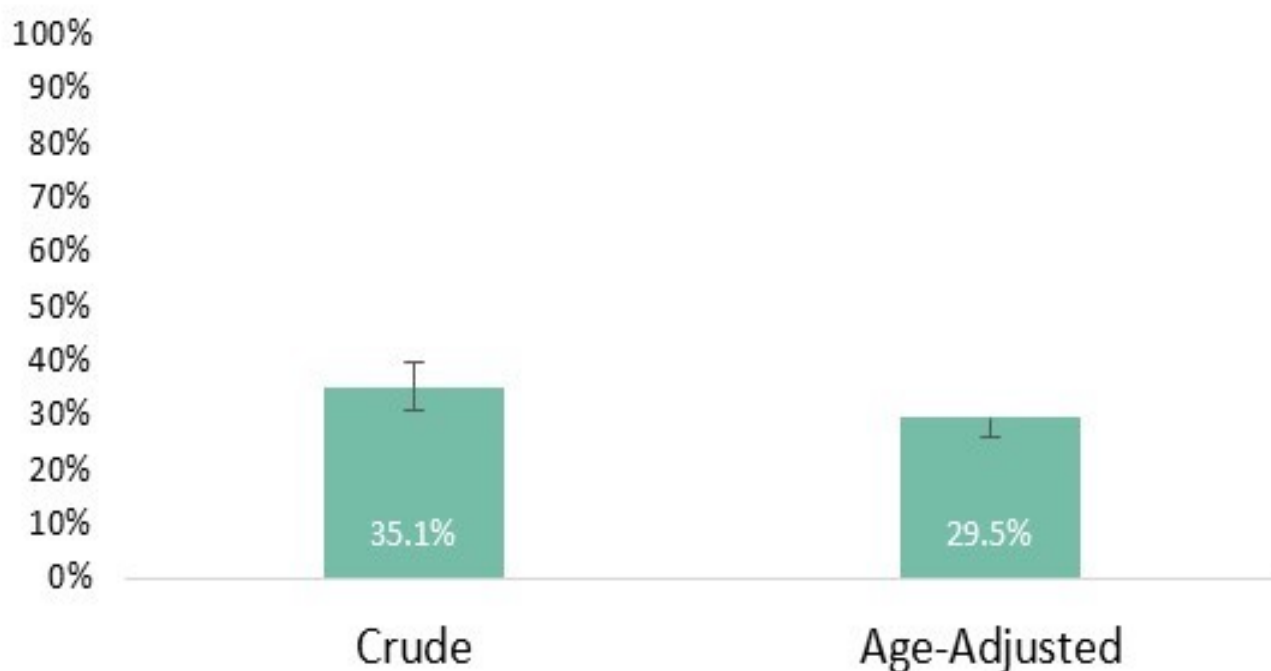
Kindergarten Exemptions by Type, 2007-2017²



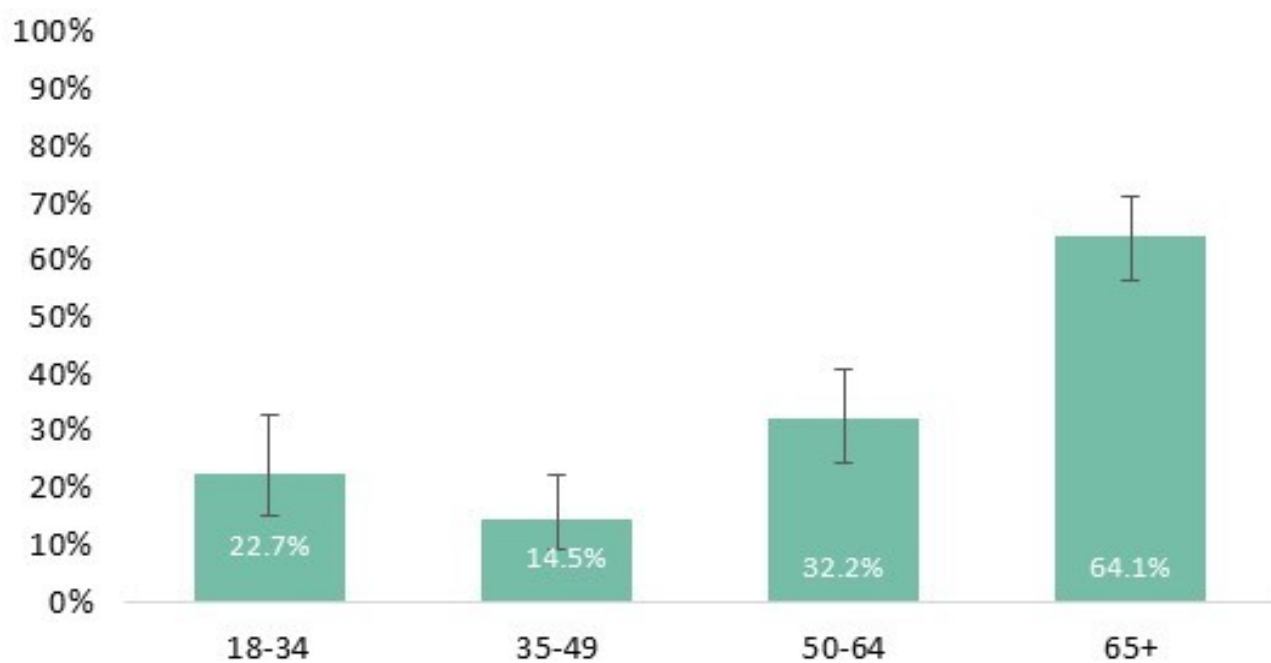
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	152,400	
	Total	Percent
≥1 dose Influenza last season*	41,011	26.9%
≥1 dose influenza in lifetime	89,987	59.0%
≥1 TDaP	61,377	40.3%
≥1 Varicella	14,458	9.5%
≥1 HPV	6,478	4.3%
≥1 Zoster**	2,015	1.3%
≥1 MMR	49,481	32.5%
≥1 PCV13	23,389	15.3%
≥1PPSV23	20,683	13.6%
≥1 Hep A	42,991	28.2%
≥1 Hep B	49,205	32.3%
≥1 Meningococcal	14,719	9.7%
≥1 HIB	29,661	19.5%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

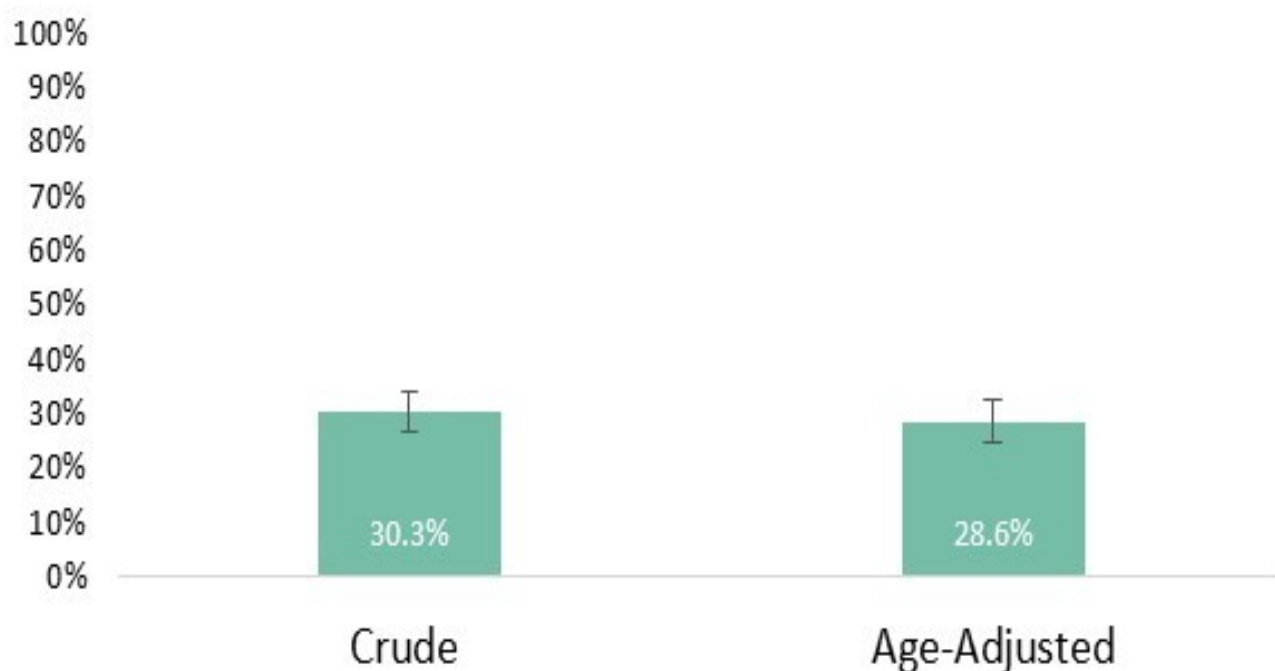
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



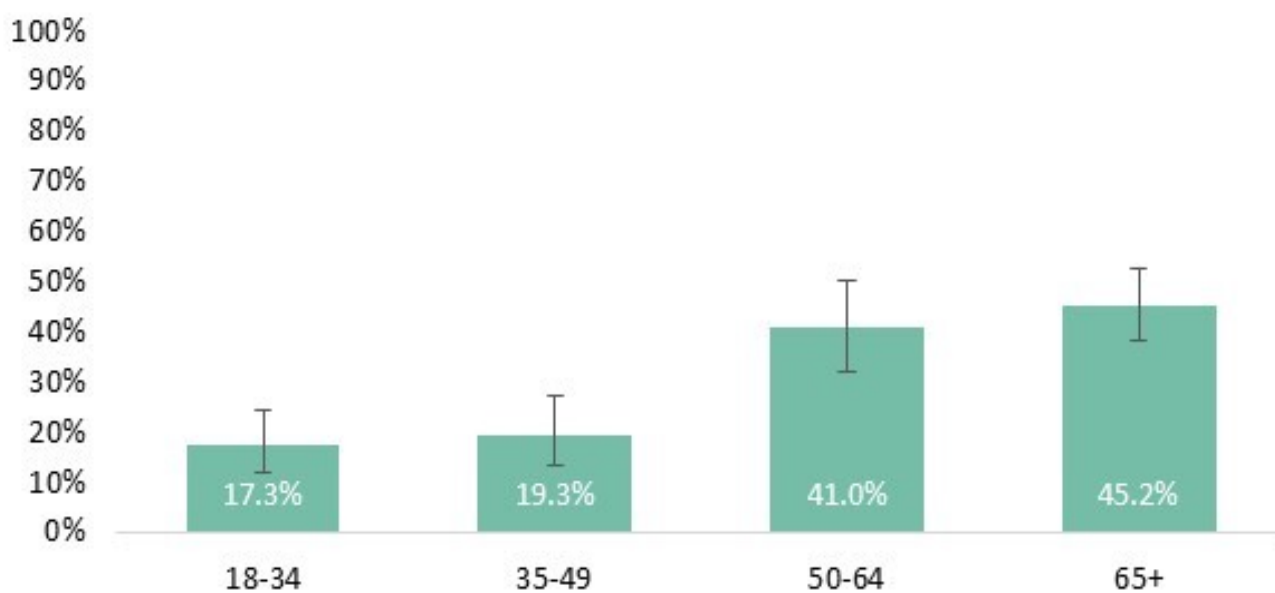
2017 Pneumococcal Vaccination (Ever Received) by Age³



2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2017		
Total	491	
	Total	Percent
≥3 doses DTaP	469	95.5%
≥4 doses DTaP	407	82.9%
≥3 doses Polio	448	91.2%
≥1 dose MMR	439	89.4%
≥3 doses Hib	459	93.5%
≥1 dose Hib	487	99.2%
≥3 doses Hep B	422	85.9%
Hep B Birth dose	385	78.4%
≥1 dose Varicella	426	86.8%
≥3 doses PCV	461	93.9%
≥4 doses PCV	408	83.1%
≥2 doses Hep A	368	74.9%
≥1 dose Rotavirus	455	92.7%
4:3:1	393	80.0%
4:3:1:3	388	79.0%
4:3:1:4	382	77.8%
4:3:1:3:3	371	75.6%
4:3:1:0:3:1	370	75.4%
4:3:1:3:3:1	366	74.5%
4:3:1:4:3:1	353	71.9%
4:3:1:0:3:1:4	360	73.3%
4:3:1:3:3:1:4	357	72.7%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	131	
	Total	Percent
≥1 dose DTaP	130	99.2%
≥1 dose Polio	122	93.1%
≥1 dose Hib	127	96.9%
≥1 dose Hep B	122	93.1%
≥2 doses Hep B	113	86.3%
≥1 dose PCV	128	97.7%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	190	
	Total	Percent
≥2 doses DTaP	141	74.2%
≥2 doses Polio	136	71.6%
≥2 doses Hib	141	74.2%
≥2 doses Hep B	167	87.9%
≥2 doses PCV	141	74.2%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	430	
	Total	Percent
≥3 doses DTaP	272	63.3%
≥2 doses Polio	353	82.1%
≥1 dose MMR	96	22.3%
≥2 doses Hib	367	85.3%
≥3 doses Hib	269	62.6%
≥2 doses Hep B	383	89.1%
≥3 doses Hep B	256	59.5%
≥1 dose Varicella	22	5.1%
≥3 doses PCV	270	62.8%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2017 and 07/01/2018		
Total	668	
	Total	Percent
≥3 doses DTaP	497	74.4%
≥4 doses DTaP	164	24.6%
≥3 doses Polio	475	71.1%
≥1 dose MMR	291	43.6%
≥3 doses Hib	489	73.2%
≥1 dose Hib	658	98.5%
≥3 doses Hep B	450	67.4%
≥1 dose Varicella	193	28.9%
≥3 doses PCV	490	73.4%
>4 dose PCV	267	40.0%
4:3:1	147	22.0%
4:3:1:3	147	22.0%
4:3:1:4	143	21.4%
4:3:1:3:3	141	21.1%
4:3:1:0:3	142	21.3%
4:3:1:4:3	125	18.7%
4:3:1:3:3:1	141	21.1%
4:3:1:0:3:1	141	21.1%
4:3:1:4:3:1	125	18.7%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	870	
	Total	Percent
≥3 doses DTaP	694	79.8%
≥4 doses DTaP	320	36.8%
≥3 doses Polio	667	76.7%
≥1 dose MMR	462	53.1%
≥3 doses Hib	683	76.7%
≥1 dose Hib	862	99.1%
≥3 doses Hep B	625	71.8%
≥1 dose Varicella	358	41.1%
≥3 doses PCV	686	78.9%
≥4 doses PCV	431	49.5%
4:3:1	295	33.9%
4:3:1:3	299	34.4%
4:3:1:4	287	33.0%
4:3:1:3:3	280	32.2%
4:3:1:0:3	281	32.3%
4:3:1:4:3	252	29.0%
4:3:1:3:3:1	278	32.0%
4:3:1:0:3:1	278	32.0%
4:3:1:4:3:1	251	28.9%
4:3:1:3:3:1:4	268	30.8%

12–17 Years of Age ⁵							
Children in USIIS born between 07/02/2000 and 07/01/2006							
Total^		5,436	Female Total		2,608	Male Total	2,774
	Total	Total %	Female Total	Female %	Male Total	Male %	
1 HPV	2,689	49.5%	1,366	52.4%	1,304	47.0%	
2 HPV	1,773	32.6%	941	36.1%	824	29.7%	
3 HPV	829	15.3%	459	17.6%	367	13.2%	

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	5,436	
	Total	Percent
≥1 dose Meningococcal	3,714	68.3%
≥1 Tdap	3,743	68.9%
≥1 Varicella	4,684	86.2%
≥2 Varicella	3,867	71.1%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	1,801	
	Total	Percent
≥2 dose Meningococcal	246	13.7%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	13,926	
	Total	Percent
≥1 dose Influenza in lifetime	9,709	69.7%
≥1 dose Influenza last flu season*	4,304	30.9%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

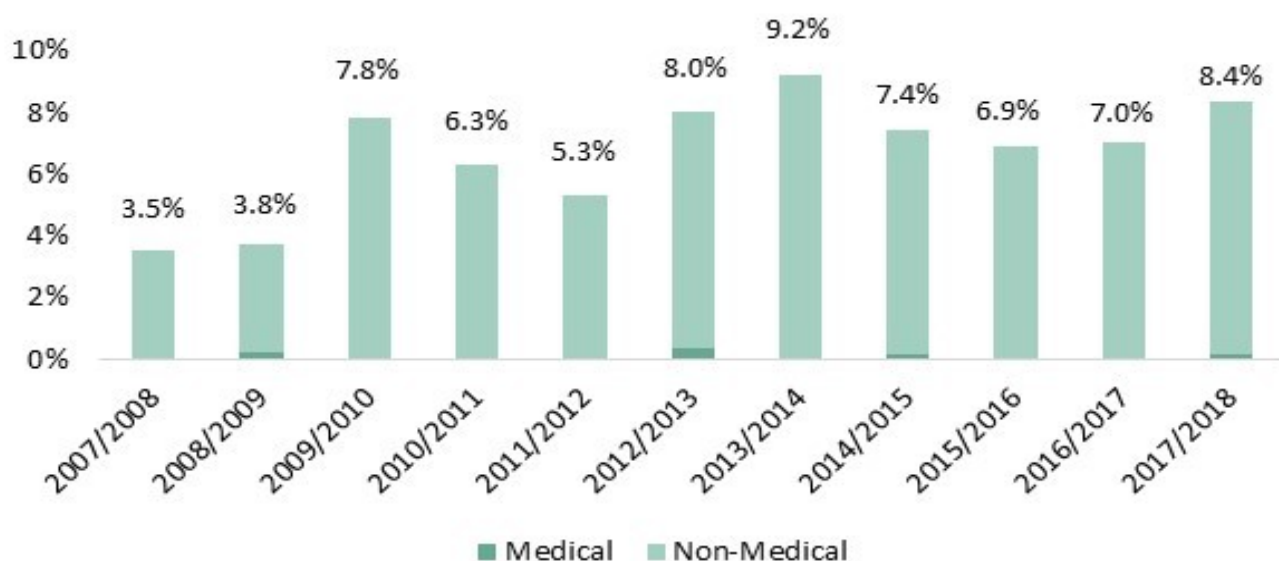
Adequately Immunized by School District 2017²

	North Summit		Park City		South Summit	
	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	93.9%	4.6%	87.1%	10.1%	89.4%	2.8%
Second-Dose Measles (K-12)	97.0%	3.0%	93.8%	6.0%	96.7%	3.2%
7th Grade Entry	99.1%	0.9%	89.8%	7.2%	94.4%	5.6%

Immunized for Child Care 2017²

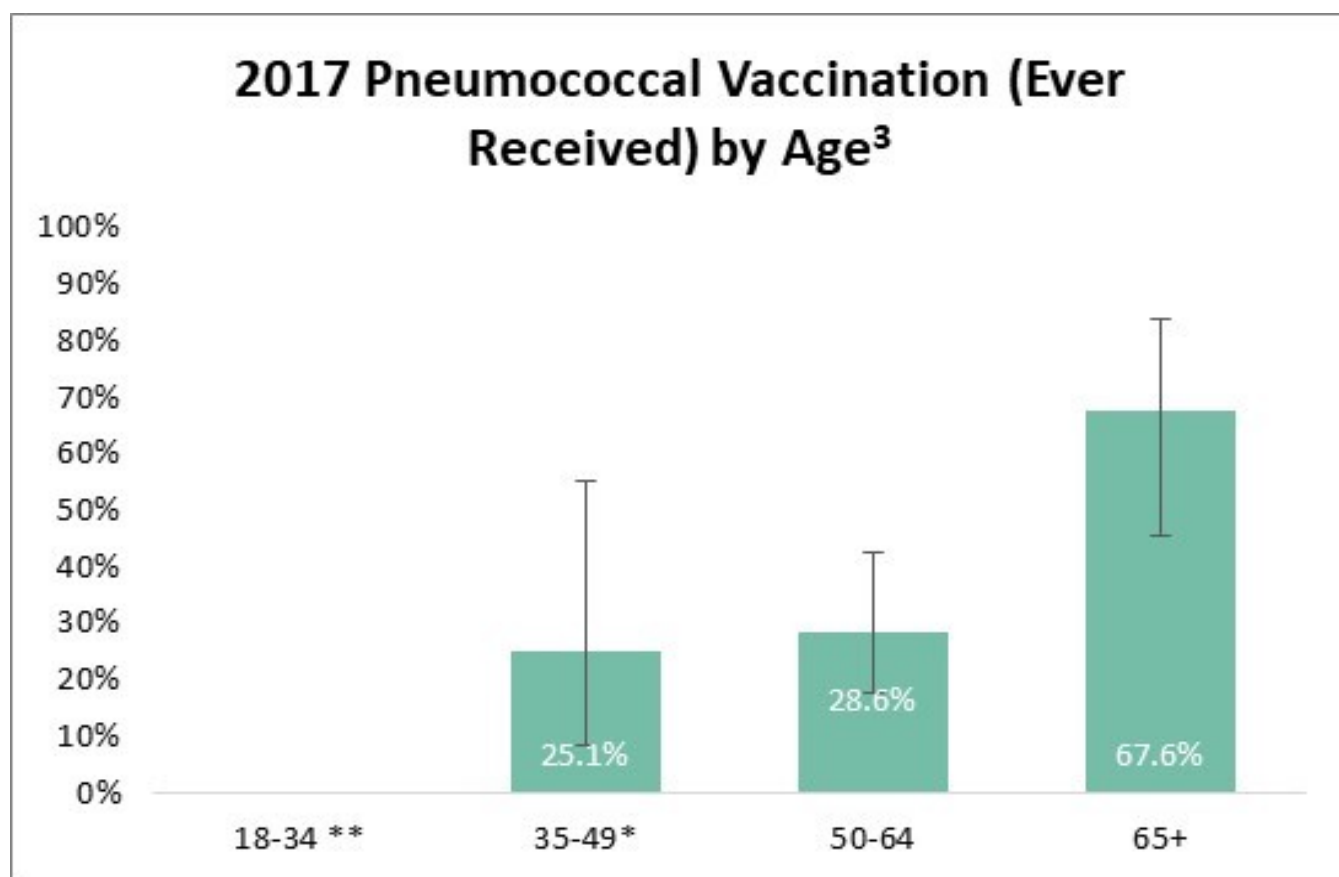
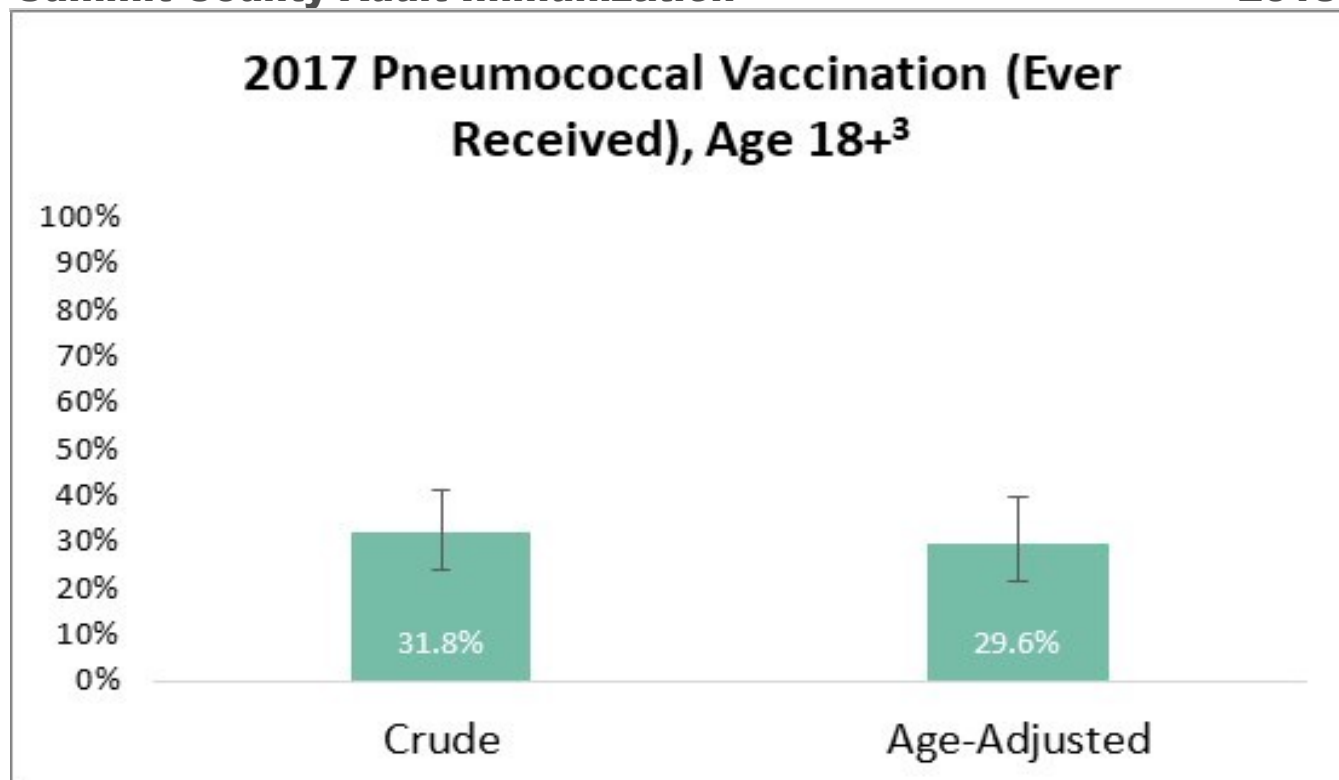
	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	96.6%	3.4%
Head Start Centers	N/A	N/A

Kindergarten Exemptions by Type, 2007-2017²



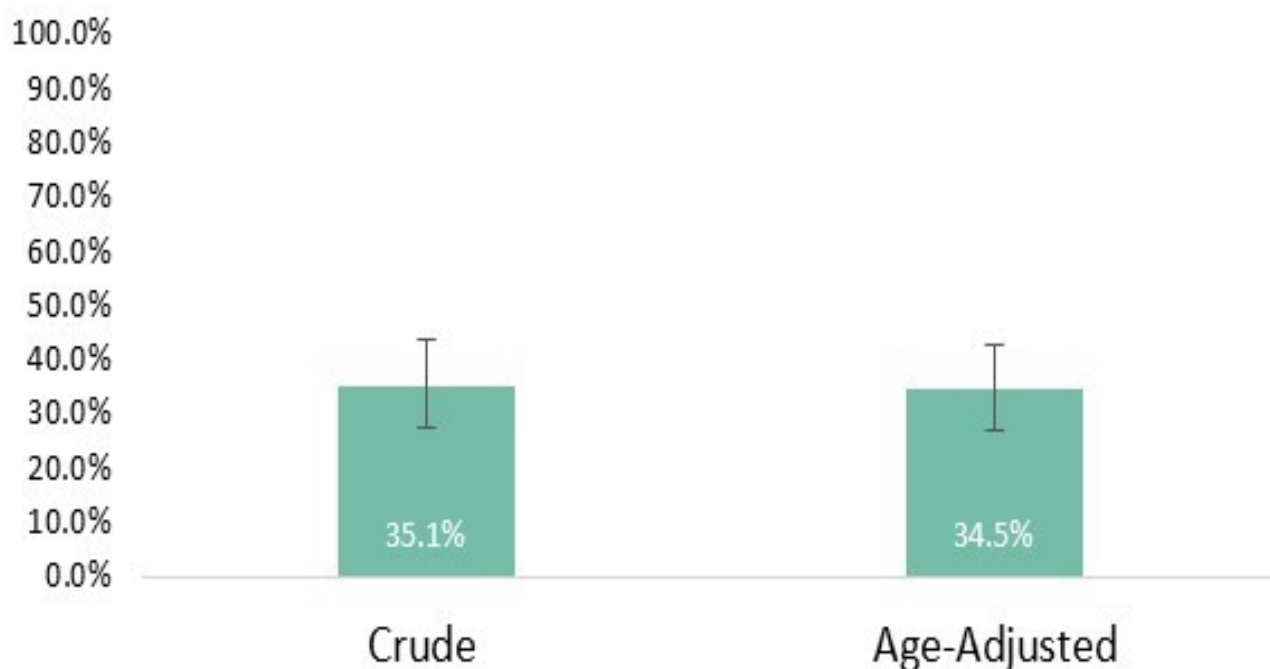
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	36,204	
	Total	Percent
≥1 dose Influenza last season*	11,135	30.8%
≥1 dose influenza in lifetime	22,463	62.0%
≥1 TDaP	17,035	47.1%
≥1 Varicella	3,296	9.1%
≥1 HPV	2,090	5.8%
≥1 Zoster**	1,360	3.8%
≥1 MMR	8,946	24.7%
≥1 PCV13	4,409	12.2%
≥1PPSV23	3,669	10.1%
≥1 Hep A	10,293	28.4%
≥1 Hep B	9,984	27.6%
≥1 Meningococcal	3,597	9.9%
≥1 HIB	4,736	13.1%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

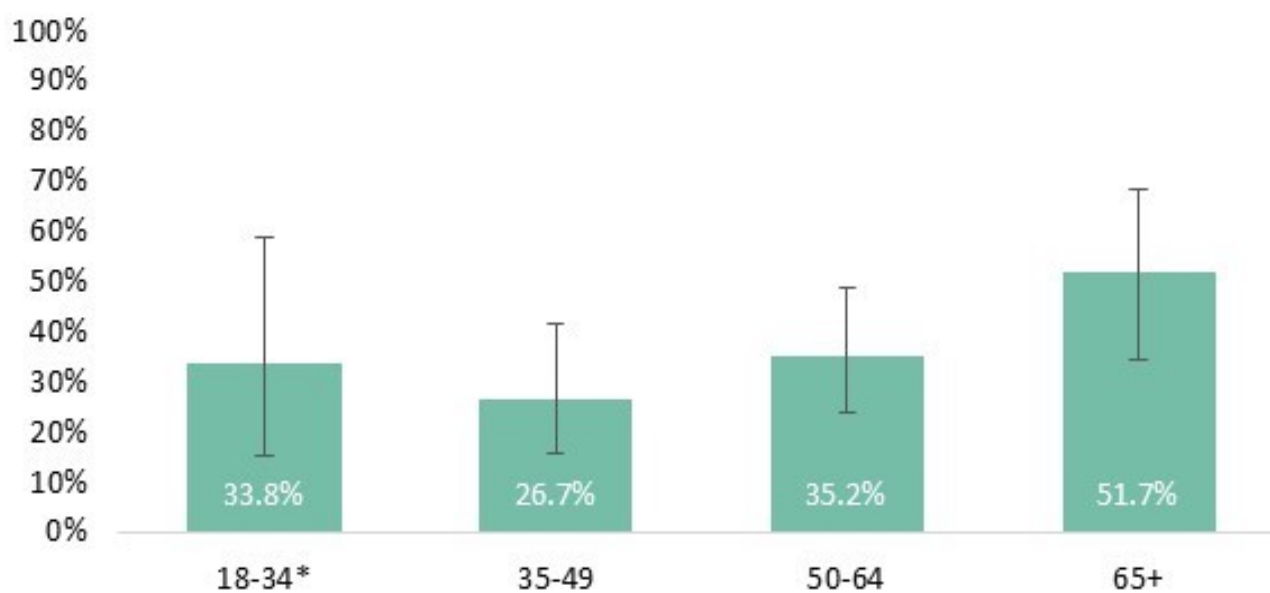


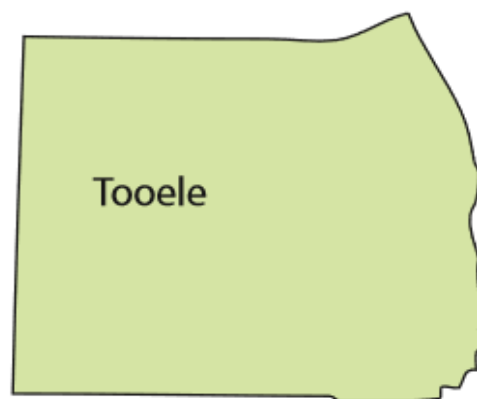
Source: BRFSS, Utah, 2017. Crude and Age-adjusted Rates. *Use caution in interpreting, the estimate has a coefficient of variation > 30% and is therefore deemed unreliable by UDOH standards. **The estimate has been suppressed because 1) The relative standard error is greater than 50% or the relative standard error can't be determined. Consider aggregating years to decrease the relative standard error and improve the reliability of the estimate. 2) the observed number of events is very small and not appropriate for publication, or 3) it could be used to calculate the number in a cell that has been suppressed.

2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	1,205	
	Total	Percent
≥3 doses DTaP	1,108	92.0%
≥4 doses DTaP	994	82.5%
≥3 doses Polio	1,098	91.1%
≥1 dose MMR	1,086	90.1%
≥3 doses Hib	1,093	90.7%
≥1 dose Hib	1,197	99.3%
≥3 doses Hep B	1,093	90.7%
Hep B Birth dose	1,050	87.1%
≥1 dose Varicella	1,083	89.9%
≥3 doses PCV	1,098	91.1%
≥4 doses PCV	952	79.0%
≥2 doses Hep A	898	74.5%
≥1 dose Rotavirus	1,090	90.5%
4:3:1	980	81.3%
4:3:1:3	977	81.1%
4:3:1:4	923	76.6%
4:3:1:3:3	959	79.6%
4:3:1:0:3:1	961	79.8%
4:3:1:3:3:1	958	79.5%
4:3:1:4:3:1	848	70.4%
4:3:1:0:3:1:4	912	75.7%
4:3:1:3:3:1:4	911	75.6%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	311	
	Total	Percent
≥1 dose DTaP	308	99.0%
≥1 dose Polio	308	99.0%
≥1 dose Hib	307	98.7%
≥1 dose Hep B	309	99.4%
≥2 doses Hep B	293	94.2%
≥1 dose PCV	309	99.4%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	482	
	Total	Percent
≥2 doses DTaP	325	67.4%
≥2 doses Polio	323	67.0%
≥2 doses Hib	327	67.8%
≥2 doses Hep B	458	95.0%
≥2 doses PCV	326	67.6%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	1,103	
	Total	Percent
≥3 doses DTaP	715	64.8%
≥2 doses Polio	911	82.6%
≥1 dose MMR	253	22.9%
≥2 doses Hib	915	83.0%
≥3 doses Hib	690	62.6%
≥2 doses Hep B	1,065	96.6%
≥3 doses Hep B	777	70.4%
≥1 dose Varicella	252	22.8%
≥3 doses PCV	704	63.8%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	1,609	
	Total	Percent
≥3 doses DTaP	1,176	73.1%
≥4 doses DTaP	403	25.0%
≥3 doses Polio	1,172	72.8%
≥1 dose MMR	698	43.4%
≥3 doses Hib	1,142	71.0%
≥1 dose Hib	1,597	99.3%
≥3 doses Hep B	1,226	76.2%
≥1 dose Varicella	692	43.0%
≥3 doses PCV	1,155	71.8%
>4 dose PCV	513	31.9%
4:3:1	397	24.7%
4:3:1:3	396	24.6%
4:3:1:4	392	24.4%
4:3:1:3:3	390	24.2%
4:3:1:0:3	391	24.3%
4:3:1:4:3	365	22.7%
4:3:1:3:3:1	391	24.3%
4:3:1:0:3:1	392	24.4%
4:3:1:4:3:1	364	22.6%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	2,085	
	Total	Percent
≥3 doses DTaP	1,625	77.9%
≥4 doses DTaP	788	37.8%
≥3 doses Polio	1,615	77.5%
≥1 dose MMR	1,132	54.3%
≥3 doses Hib	1,585	76.0%
≥1 dose Hib	2,065	99.0%
≥3 doses Hep B	1,675	80.3%
≥1 dose Varicella	1,124	53.9%
≥3 doses PCV	1,600	76.7%
≥4 doses PCV	906	43.5%
4:3:1	778	37.3%
4:3:1:3	786	37.7%
4:3:1:4	769	36.9%
4:3:1:3:3	780	37.4%
4:3:1:0:3	782	37.5%
4:3:1:4:3	716	34.3%
4:3:1:3:3:1	775	37.2%
4:3:1:0:3:1	776	37.2%
4:3:1:4:3:1	710	34.1%
4:3:1:3:3:1:4	758	36.4%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total^	9,729	Female Total	4,747	Male Total	4,935
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	5,067	52.1%	2,616	55.1%	2,433	49.3%
2 HPV	3,033	31.2%	1,632	34.4%	1,390	28.2%
3 HPV	1,537	15.8%	871	18.3%	660	13.4%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	9,729	
	Total	Percent
≥1 dose Meningococcal	6,757	69.5%
≥1 Tdap	7,051	72.5%
≥1 Varicella	8,163	83.9%
≥2 Varicella	6,100	62.7%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	3,131	
	Total	Percent
≥2 dose Meningococcal	586	18.7%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	27,803	
	Total	Percent
≥1 dose Influenza in lifetime	19,494	70.1%
≥1 dose Influenza last flu season*	7,594	27.3%

^Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

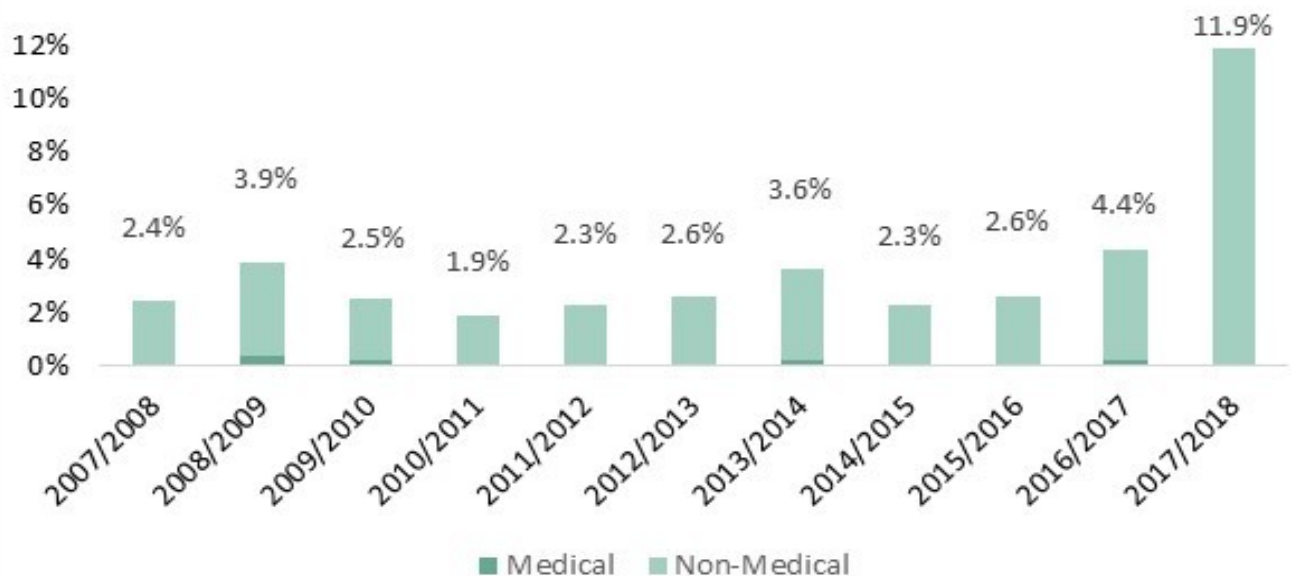
Adequately Immunized by School District 2017²

Tooele		
	Adequately Immunized	Total Exemptions
Kindergarten School Entry	86.4%	12.3%
Second-Dose Measles (K-12)	93.5%	6.5%
7th Grade Entry	91.2%	7.4%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	97.8%	0.6%
Head Start Centers	N/A	N/A

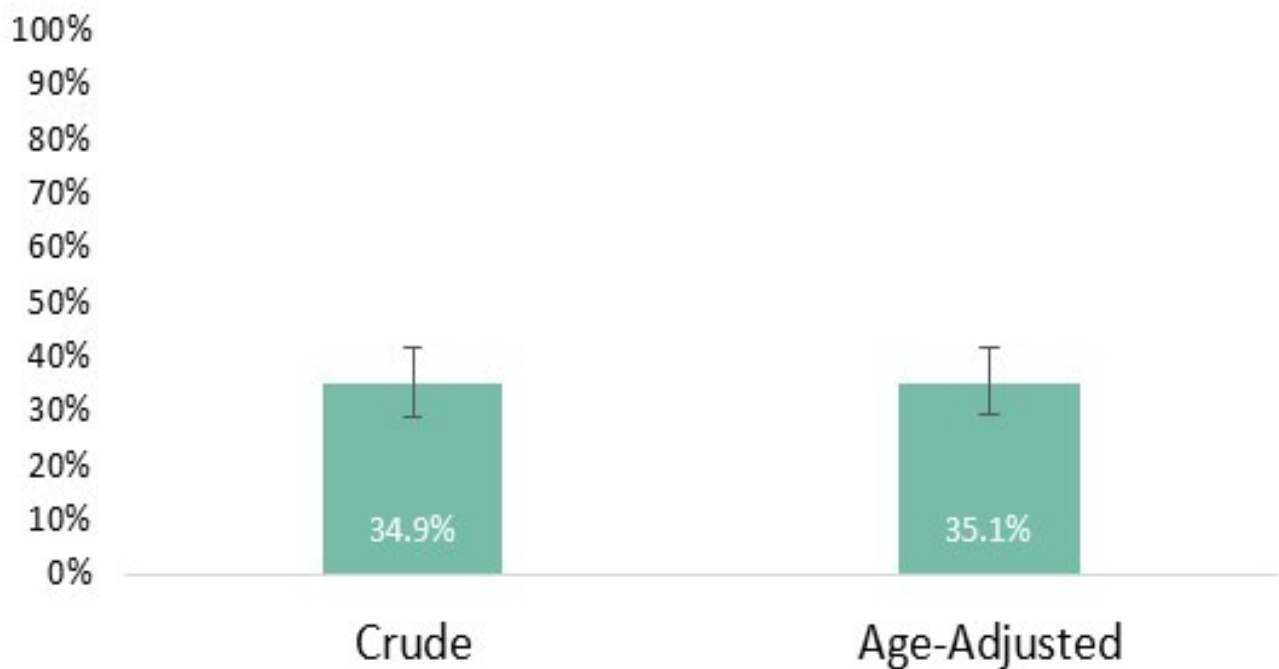
Kindergarten Exemption by Type, 2007-2017²



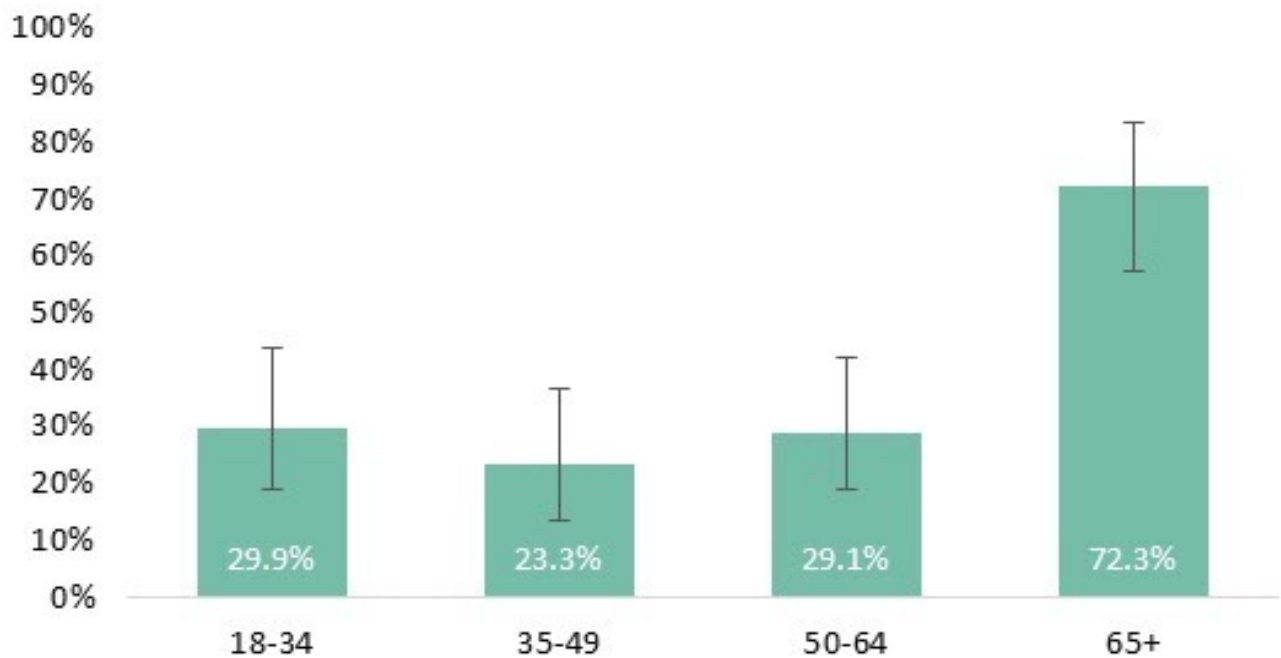
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	51,220	
	Total	Percent
≥1 dose Influenza last season*	11,555	22.6%
≥1 dose influenza in lifetime	31,244	61.0%
≥1 TDaP	21,912	42.8%
≥1 Varicella	4,930	9.6%
≥1 HPV	3,385	6.6%
≥1 Zoster**	577	1.1%
≥1 MMR	18,769	36.6%
≥1 PCV13	5,273	10.3%
≥1PPSV23	7,046	13.8%
≥1 Hep A	13,219	25.8%
≥1 Hep B	15,997	31.2%
≥1 Meningococcal	4,704	9.2%
≥1 HIB	9,585	18.7%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

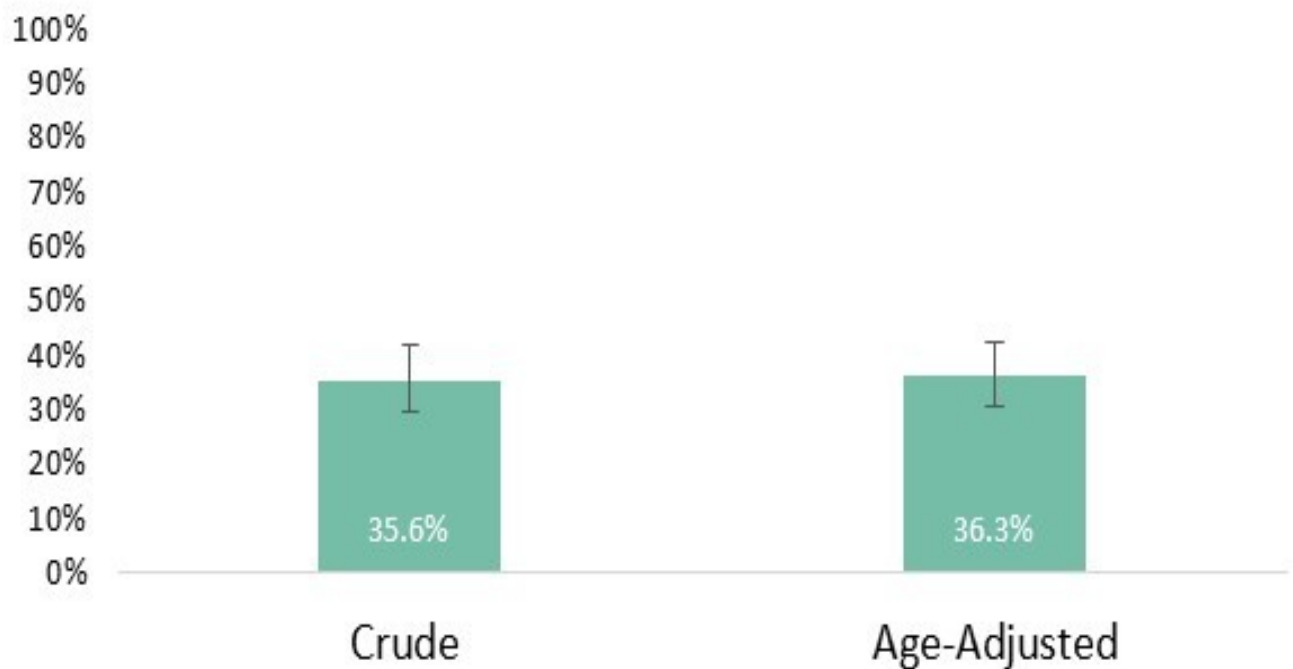
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



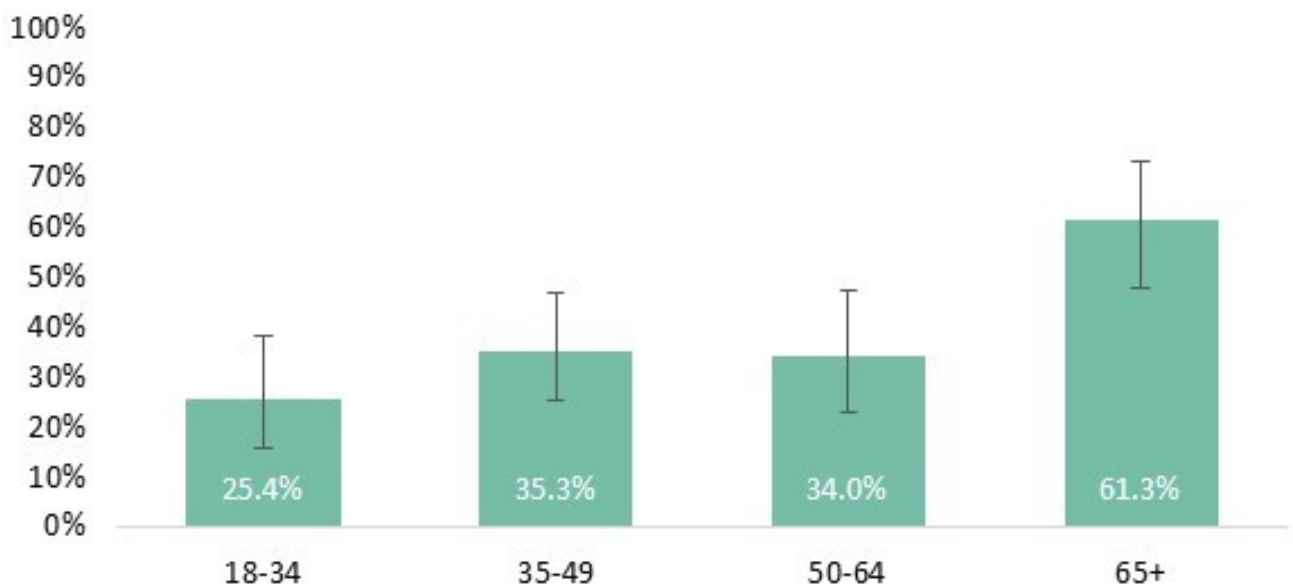
2017 Pneumococcal Vaccination (Ever Received) by Age³

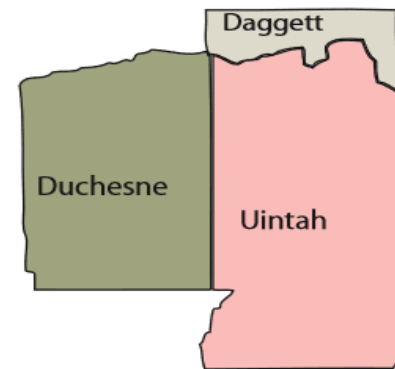


2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	1,008	
	Total	Percent
≥3 doses DTaP	918	91.1%
≥4 doses DTaP	731	72.5%
≥3 doses Polio	910	90.3%
≥1 dose MMR	887	88.0%
≥3 doses Hib	898	89.1%
≥1 dose Hib	992	98.4%
≥3 doses Hep B	923	91.6%
Hep B Birth dose	881	87.4%
≥1 dose Varicella	848	84.1%
≥3 doses PCV	896	88.9%
≥4 doses PCV	747	74.1%
≥2 doses Hep A	390	38.7%
≥1 dose Rotavirus	920	91.3%
4:3:1	722	71.6%
4:3:1:3	719	71.3%
4:3:1:4	670	66.5%
4:3:1:3:3	715	70.9%
4:3:1:0:3:1	701	69.5%
4:3:1:3:3:1	698	69.2%
4:3:1:4:3:1	642	63.7%
4:3:1:0:3:1:4	653	64.8%
4:3:1:3:3:1:4	652	64.7%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	245	
	Total	Percent
≥1 dose DTaP	245	100%
≥1 dose Polio	244	99.6%
≥1 dose Hib	243	99.2%
≥1 dose Hep B	244	99.6%
≥2 doses Hep B	226	92.2%
≥1 dose PCV	243	99.2%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	379	
	Total	Percent
≥2 doses DTaP	243	64.1%
≥2 doses Polio	242	63.9%
≥2 doses Hib	238	62.8%
≥2 doses Hep B	356	93.9%
≥2 doses PCV	236	62.3%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1 MMR, 4 HIB, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4 = 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	874	
	Total	Percent
≥3 doses DTaP	489	55.9%
≥2 doses Polio	691	79.1%
≥1 dose MMR	157	18.0%
≥2 doses Hib	682	78.0%
≥3 doses Hib	468	53.5%
≥2 doses Hep B	837	95.8%
≥3 doses Hep B	636	72.8%
≥1 dose Varicella	105	12.0%
≥3 doses PCV	470	53.8%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	1,273	
	Total	Percent
≥3 doses DTaP	835	65.6%
≥4 doses DTaP	187	14.7%
≥3 doses Polio	825	64.8%
≥1 dose MMR	462	36.3%
≥3 doses Hib	802	63.0%
≥1 dose Hib	1,255	98.6%
≥3 doses Hep B	998	78.4%
≥1 dose Varicella	370	29.1%
≥3 doses PCV	810	63.6%
>4 dose PCV	311	24.4%
4:3:1	180	14.1%
4:3:1:3	180	14.1%
4:3:1:4	176	13.8%
4:3:1:3:3	181	14.2%
4:3:1:0:3	181	14.2%
4:3:1:4:3	170	13.4%
4:3:1:3:3:1	170	13.4%
4:3:1:0:3:1	170	13.4%
4:3:1:4:3:1	160	12.6%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	1,711	
	Total	Percent
≥3 doses DTaP	1,234	72.1%
≥4 doses DTaP	474	27.7%
≥3 doses Polio	1,220	71.3%
≥1 dose MMR	832	48.6%
≥3 doses Hib	1,195	69.8%
≥1 dose Hib	1,689	98.7%
≥3 doses Hep B	1,408	82.3%
≥1 dose Varicella	718	42.0%
≥3 doses PCV	1,204	70.4%
≥4 doses PCV	622	36.4%
4:3:1	458	26.8%
4:3:1:3	464	27.1%
4:3:1:4	451	26.4%
4:3:1:3:3	463	27.1%
4:3:1:0:3	464	27.1%
4:3:1:4:3	430	25.1%
4:3:1:3:3:1	446	26.1%
4:3:1:0:3:1	447	26.1%
4:3:1:4:3:1	414	24.2%
4:3:1:3:3:1:4	437	25.5%

12–17 Years of Age ⁵							
Children in USIIS born between 07/02/2000 and 07/01/2006							
Total^		7,172	Female Total		3,454	Male Total	3,652
	Total	Total %	Female Total	Female %	Male Total	Male %	
1 HPV	2,921	40.7%	1,580	45.7%	1,308	35.8%	
2 HPV	1,710	23.8%	964	27.9%	733	20.1%	
3 HPV	891	12.4%	523	15.1%	363	9.9%	

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	7,172	
	Total	Percent
≥1 dose Meningococcal	5,038	70.2%
≥1 Tdap	5,484	76.5%
≥1 Varicella	6,567	91.6%
≥2 Varicella	5,385	75.1%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	2,282	
	Total	Percent
≥2 dose Meningococcal	333	14.6%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	22,037	
	Total	Percent
≥1 dose Influenza in lifetime	11,482	52.1%
≥1 dose Influenza last flu season*	3,850	17.5%

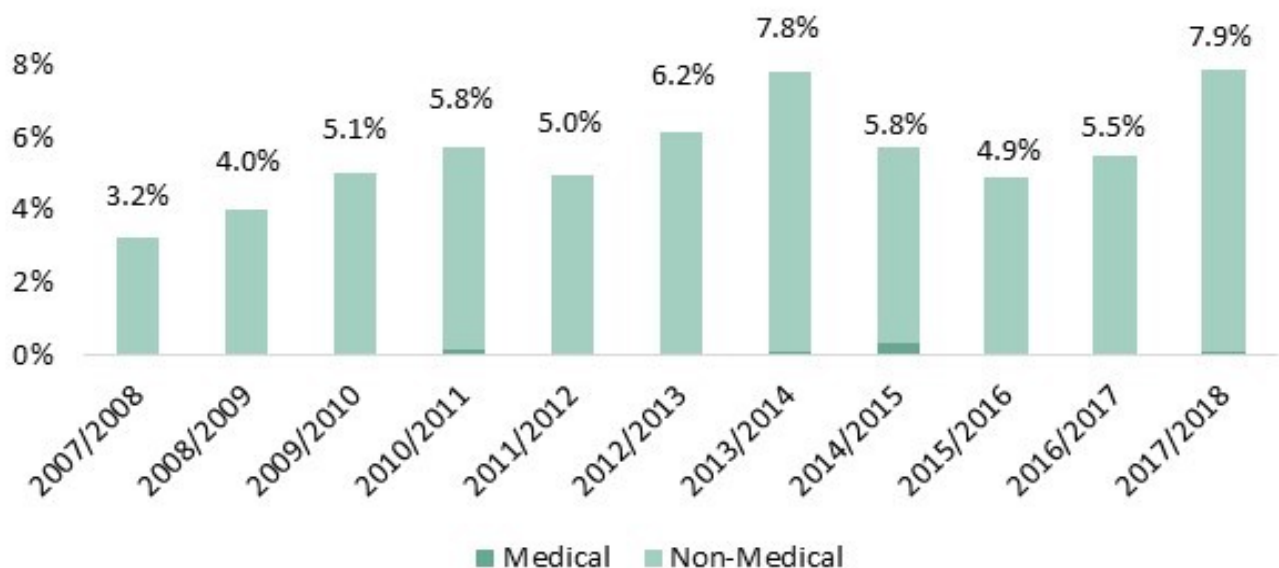
Adequately Immunized by School District 2017²

	Daggett		Duchesne		Uintah	
	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	90.9%	9.1%	86.6%	8.3%	88.6%	7.4%
Second-Dose Measles (K-12)	99.5%	0.5%	95.0%	4.5%	95.0%	5.0%
7th Grade Entry	100%	0%	90.4%	5.8%	91.0%	7.0%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	91.5%	2.7%
Head Start Centers	N/A	N/A

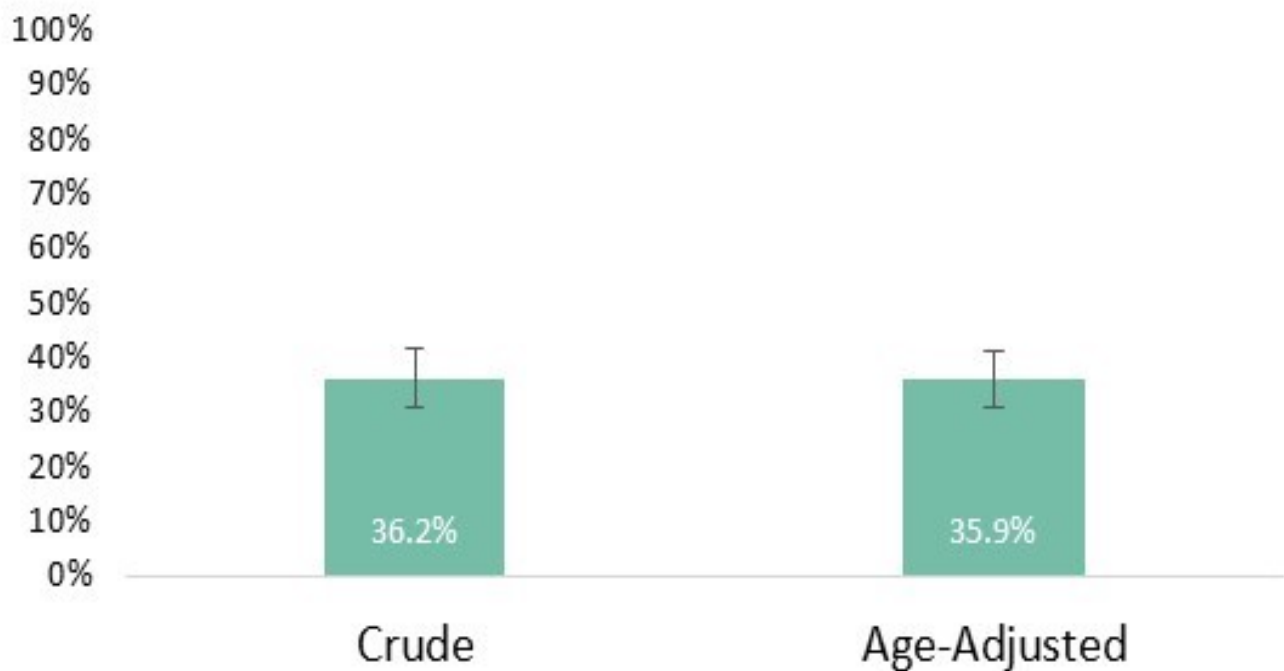
Kindergarten Exemptions by Type, 2007-2017²



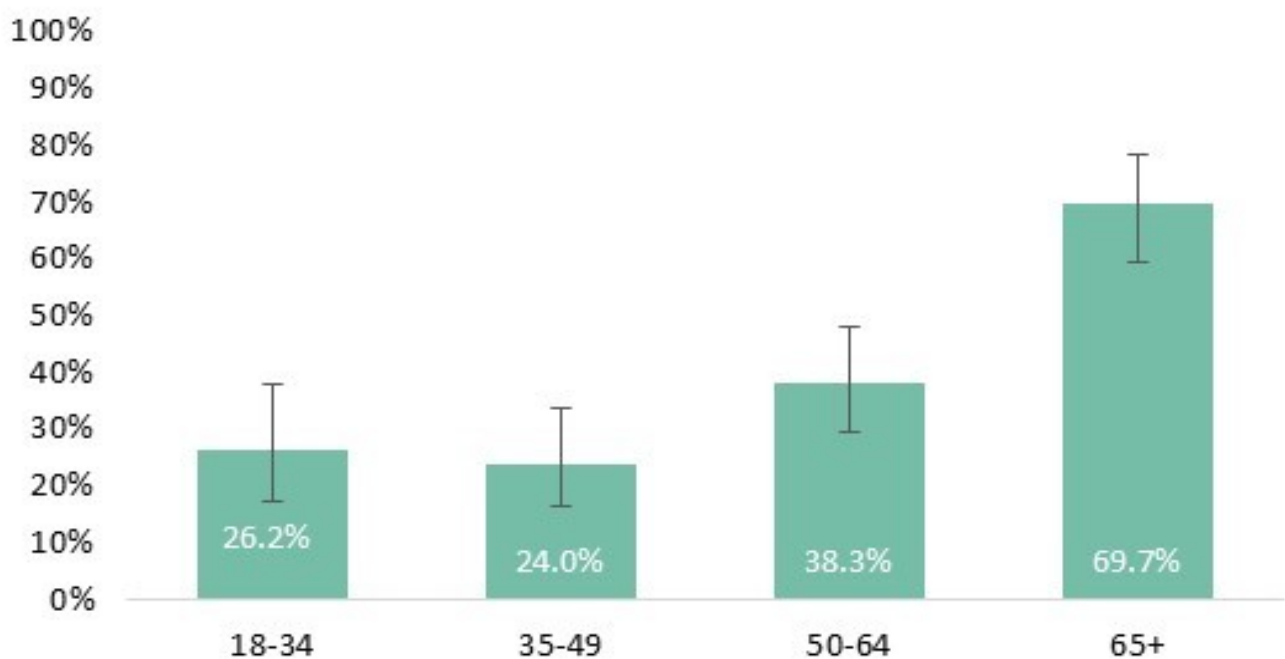
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	41,370	
	Total	Percent
≥1 dose Influenza last season*	6,963	16.8%
≥1 dose influenza in lifetime	18,391	44.5%
≥1 TDaP	16,026	38.7%
≥1 Varicella	3,968	9.6%
≥1 HPV	1,948	4.7%
≥1 Zoster**	322	0.8%
≥1 MMR	18,601	45.0%
≥1 PCV13	3,034	7.3%
≥1PPSV23	4,168	10.1%
≥1 Hep A	10,186	24.6%
≥1 Hep B	12,052	29.1%
≥1 Meningococcal	3,618	8.7%
≥1 HIB	8,363	20.2%

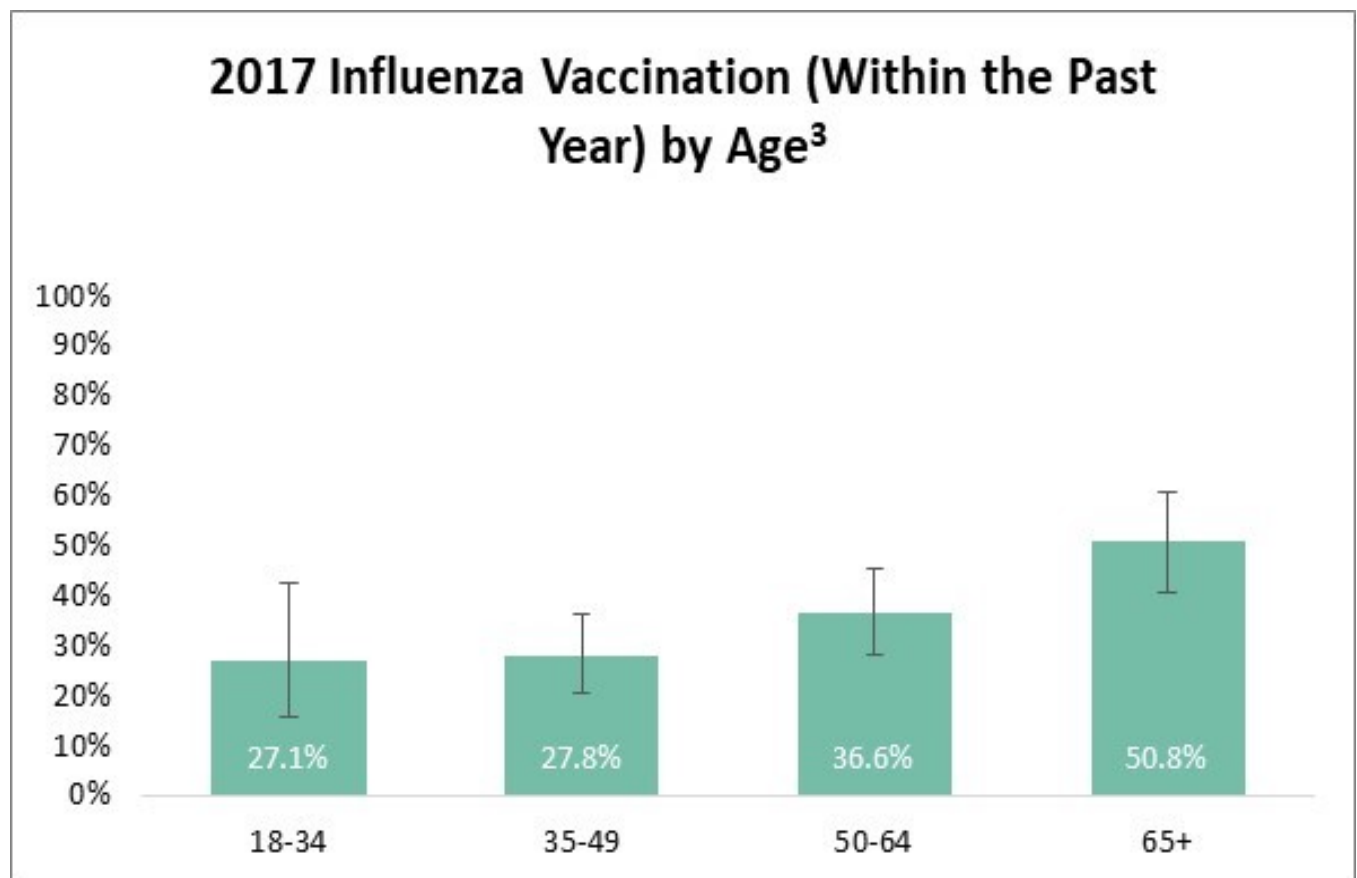
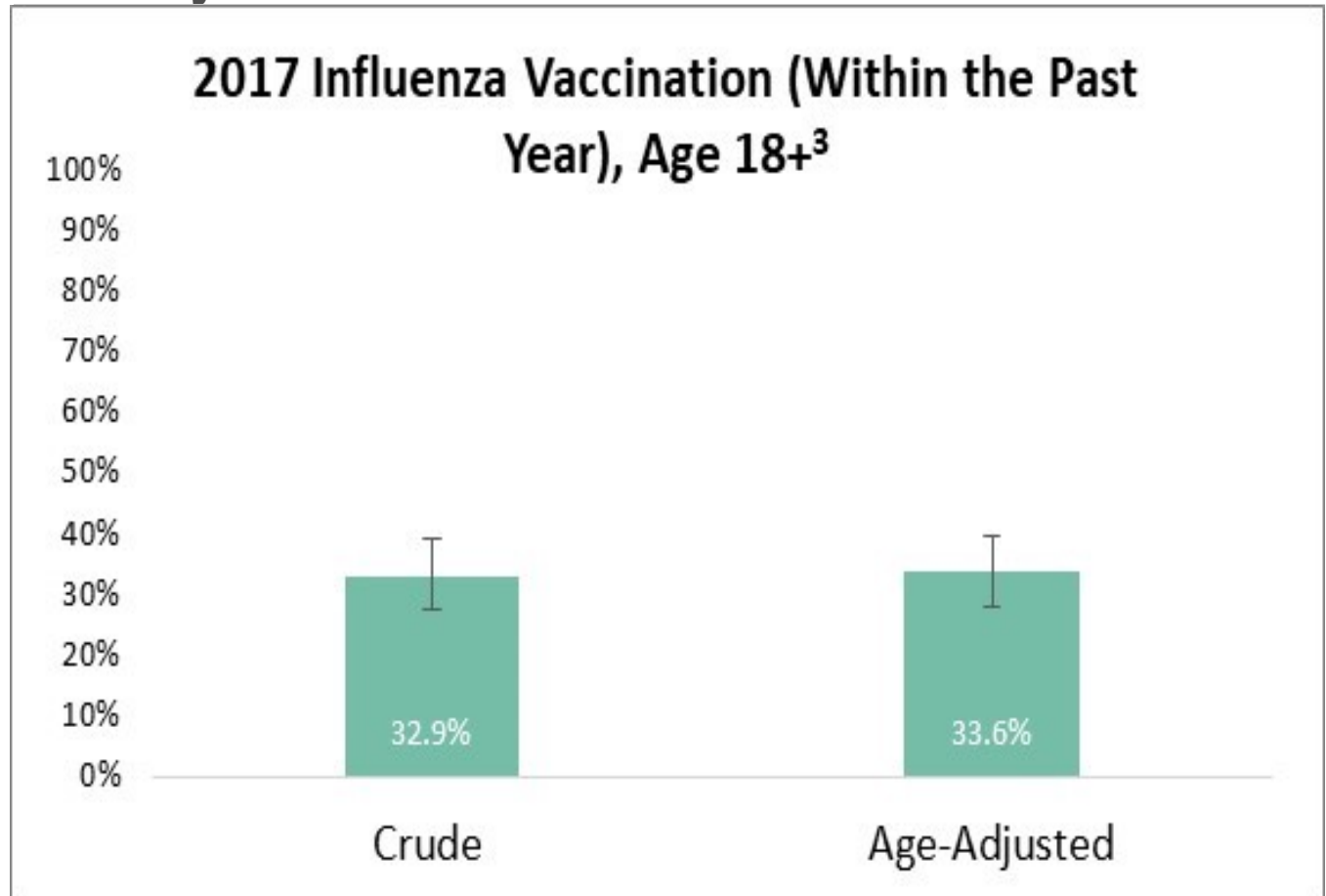
*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

2017 Pneumococcal Vaccination (Ever Received), Age 18+³



2017 Pneumococcal Vaccination (Ever Received) by Age³





Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	12,053	
	Total	Percent
≥3 doses DTaP	10,393	86.2%
≥4 doses DTaP	8,053	66.8%
≥3 doses Polio	9,901	82.1%
≥1 dose MMR	9,953	82.6%
≥3 doses Hib	10,325	85.7%
≥1 dose Hib	11,868	98.5%
≥3 doses Hep B	9,551	79.2%
Hep B Birth dose	9,766	81.0%
≥1 dose Varicella	9,894	82.1%
≥3 doses PCV	10,381	86.1%
≥4 doses PCV	8,397	69.7%
≥2 doses Hep A	8,157	67.7%
≥1 dose Rotavirus	10,881	90.3%
4:3:1	7,669	63.6%
4:3:1:3	7,642	63.4%
4:3:1:4	7,297	60.5%
4:3:1:3:3	7,338	60.9%
4:3:1:0:3:1	7,312	60.7%
4:3:1:3:3:1	7,288	60.5%
4:3:1:4:3:1	6,585	54.6%
4:3:1:0:3:1:4	6,992	58.0%
4:3:1:3:3:1:4	6,985	58.0%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	3,523	
	Total	Percent
≥1 dose DTaP	3,512	99.7%
≥1 dose Polio	3,490	99.1%
≥1 dose Hib	3,499	99.3%
≥1 dose Hep B	3,460	98.2%
≥2 doses Hep B	3,253	92.3%
≥1 dose PCV	3,484	98.9%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	5,151	
	Total	Percent
≥2 doses DTaP	3,722	72.3%
≥2 doses Polio	3,694	71.7%
≥2 doses Hib	3,698	71.8%
≥2 doses Hep B	4,796	93.1%
≥2 doses PCV	3,673	71.3%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib. 4:3:1:4 = 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB. 4:3:1:0:3:1 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ Hib, 3+HepB, 1+Varicella. 4:3:1:4:3:1 = 4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4 = 4 DTaP, 3 Polio, 1 MMR, 0 Hib, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	11,458	
	Total	Percent
≥3 doses DTaP	6,675	58.3%
≥2 doses Polio	9,415	82.2%
≥1 dose MMR	2,093	18.3%
≥2 doses Hib	9,436	82.4%
≥3 doses Hib	6,414	56.0%
≥2 doses Hep B	10,717	93.5%
≥3 doses Hep B	6,264	54.7%
≥1 dose Varicella	1,990	17.4%
≥3 doses PCV	6,880	60.0%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	16,855	
	Total	Percent
≥3 doses DTaP	10,903	64.7%
≥4 doses DTaP	2,996	17.8%
≥3 doses Polio	10,554	62.6%
≥1 dose MMR	6,536	38.8%
≥3 doses Hib	10,646	63.2%
≥1 dose Hib	16,636	98.7%
≥3 doses Hep B	10,340	61.3%
≥1 dose Varicella	6,415	38.1%
≥3 doses PCV	11,208	66.5%
>4 dose PCV	4,762	28.3%
4:3:1	2,905	17.2%
4:3:1:3	2,900	17.2%
4:3:1:4	2,780	16.5%
4:3:1:3:3	2,760	16.4%
4:3:1:0:3	2,766	16.4%
4:3:1:4:3	2,562	15.2%
4:3:1:3:3:1	2,740	16.3%
4:3:1:0:3:1	2,746	16.3%
4:3:1:4:3:1	2,539	15.1%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	21,849	
	Total	Percent
≥3 doses DTaP	15,483	70.9%
≥4 doses DTaP	6,529	29.9%
≥3 doses Polio	14,852	68.0%
≥1 dose MMR	10,668	48.8%
≥3 doses Hib	15,024	68.8%
≥1 dose Hib	21,555	98.7%
≥3 doses Hep B	14,389	65.9%
≥1 dose Varicella	10,529	48.2%
≥3 doses PCV	15,602	71.4%
≥4 doses PCV	8,070	36.9%
4:3:1	6,235	28.5%
4:3:1:3	6,303	28.8%
4:3:1:4	5,850	26.8%
4:3:1:3:3	5,900	27.0%
4:3:1:0:3	5,913	27.1%
4:3:1:4:3	5,246	24.0%
4:3:1:3:3:1	5,852	26.8%
4:3:1:0:3:1	5,864	26.8%
4:3:1:4:3:1	5,199	23.8%
4:3:1:3:3:1:4	5,513	25.2%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total^	80,493	Female Total	38,901	Male Total	40,920
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	31,984	39.7%	17,128	44.0%	14,791	36.1%
2 HPV	17,432	21.7%	9,508	24.4%	7,891	19.3%
3 HPV	7,156	8.9%	4,137	10.6%	3,007	8.9%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	80,493	
	Total	Percent
≥1 dose Meningococcal	50,910	63.2%
≥1 Tdap	52,617	65.4%
≥1 Varicella	58,736	73.0%
≥2 Varicella	33,874	42.1%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	25,800	
	Total	Percent
≥2 dose Meningococcal	3,190	12.4%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	240,950	
	Total	Percent
≥1 dose Influenza in lifetime	146,393	60.8%
≥1 dose Influenza last flu season*	64,278	26.7%

^Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018.

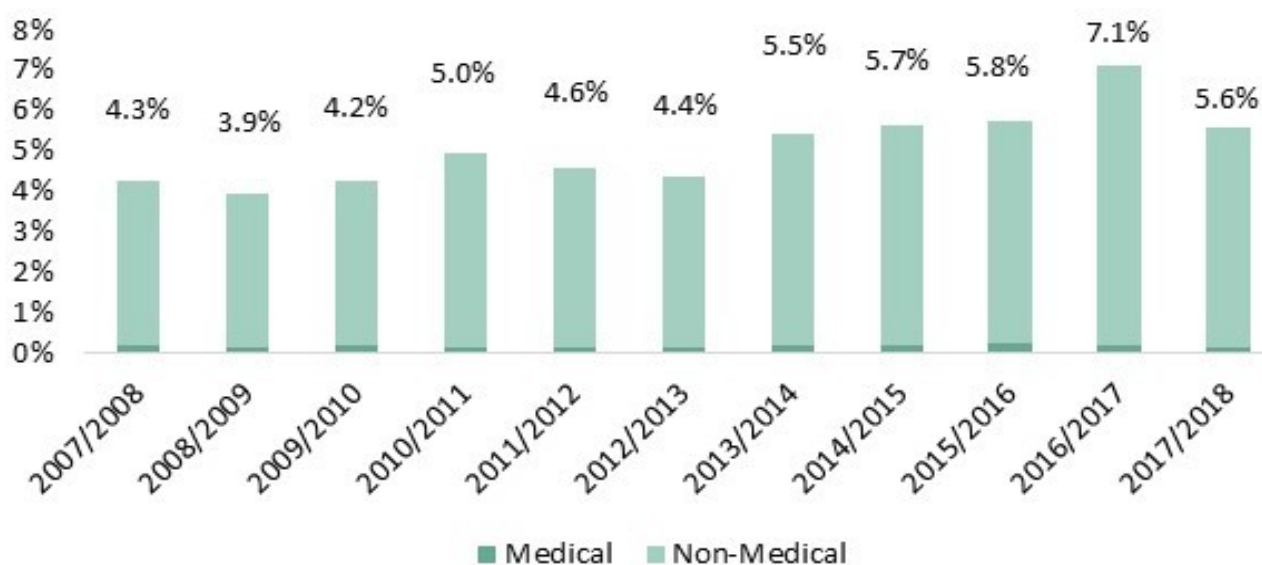
Adequately Immunized by School District 2017²

	Alpine		Nebo		Provo	
	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	87.9%	4.8%	91.7%	4.5%	86.9%	6.3%
Second-Dose Measles (K-12)	94.9%	4.6%	95.9%	4.0%	92.6%	7.1%
7th Grade Entry	88.7%	6.1%	91.1%	6.1%	84.2%	11.5%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	91.2%	1.5%
Head Start Centers	94.2%	1.1%

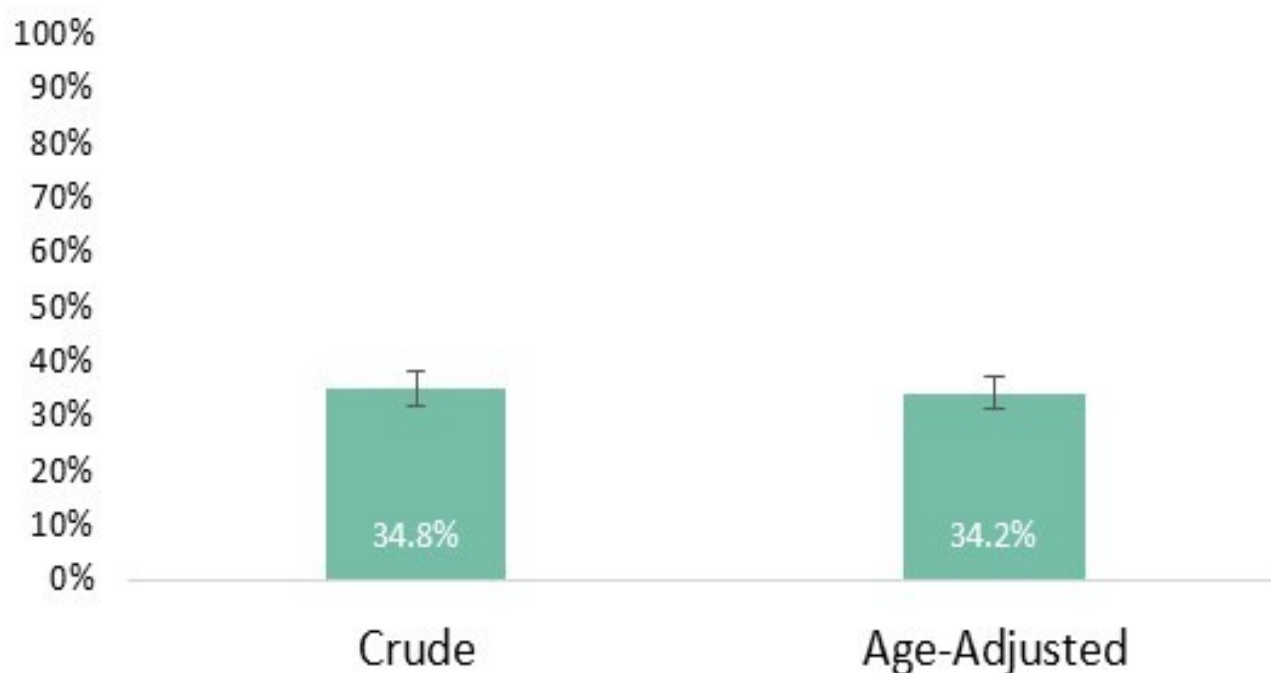
Kindergarten Exemptions by Type, 2007-2017²



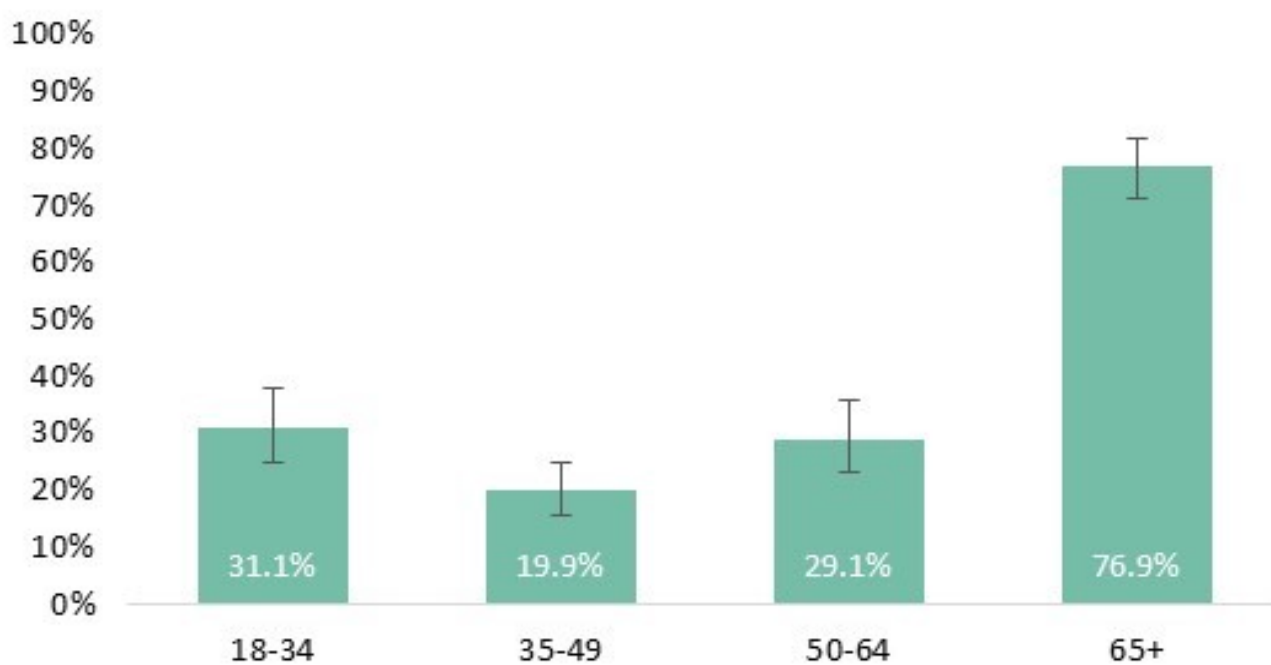
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	389,763	
	Total	Percent
≥1 dose Influenza last season*	81,659	21.0%
≥1 dose influenza in lifetime	241,472	62.0%
≥1 TDaP	175,903	45.1%
≥1 Varicella	40,471	10.4%
≥1 HPV	18,044	4.6%
≥1 Zoster**	3,818	1.0%
≥1 MMR	126,210	32.4%
≥1 PCV13	26,466	6.8%
≥1PPSV23	43,178	11.1%
≥1 Hep A	133,757	34.3%
≥1 Hep B	141,324	36.3%
≥1 Meningococcal	47,880	12.3%
≥1 HIB	69,710	17.9%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

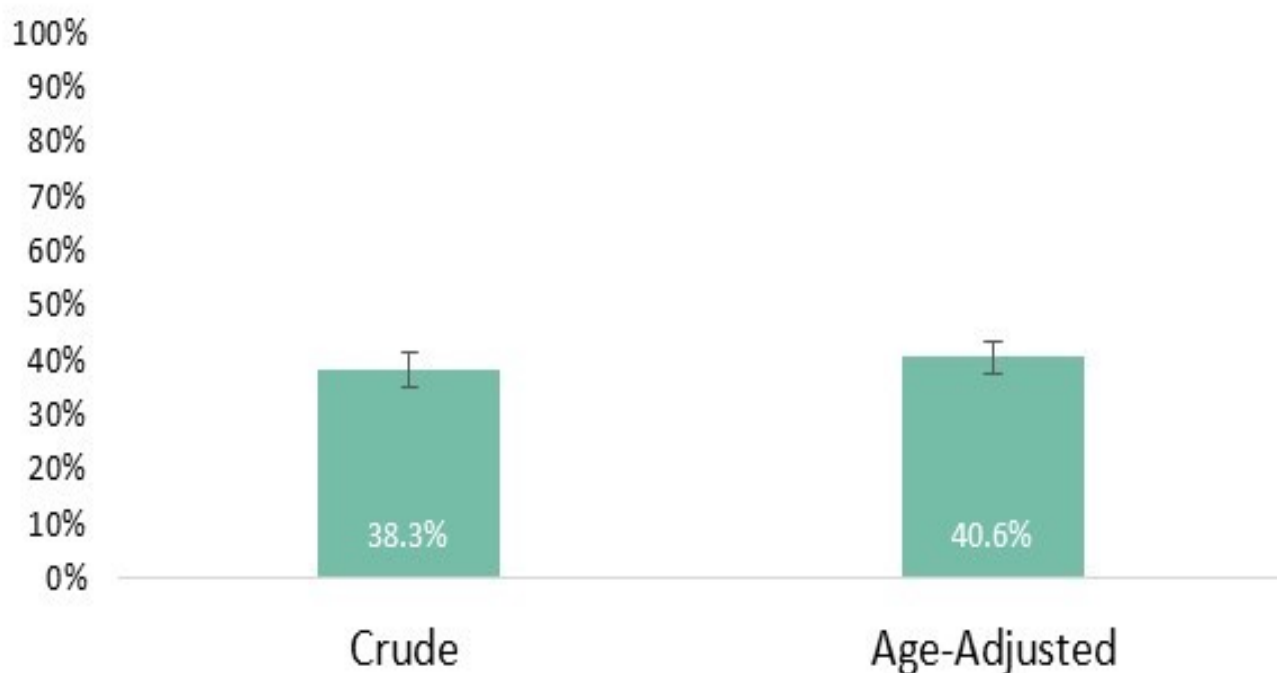
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



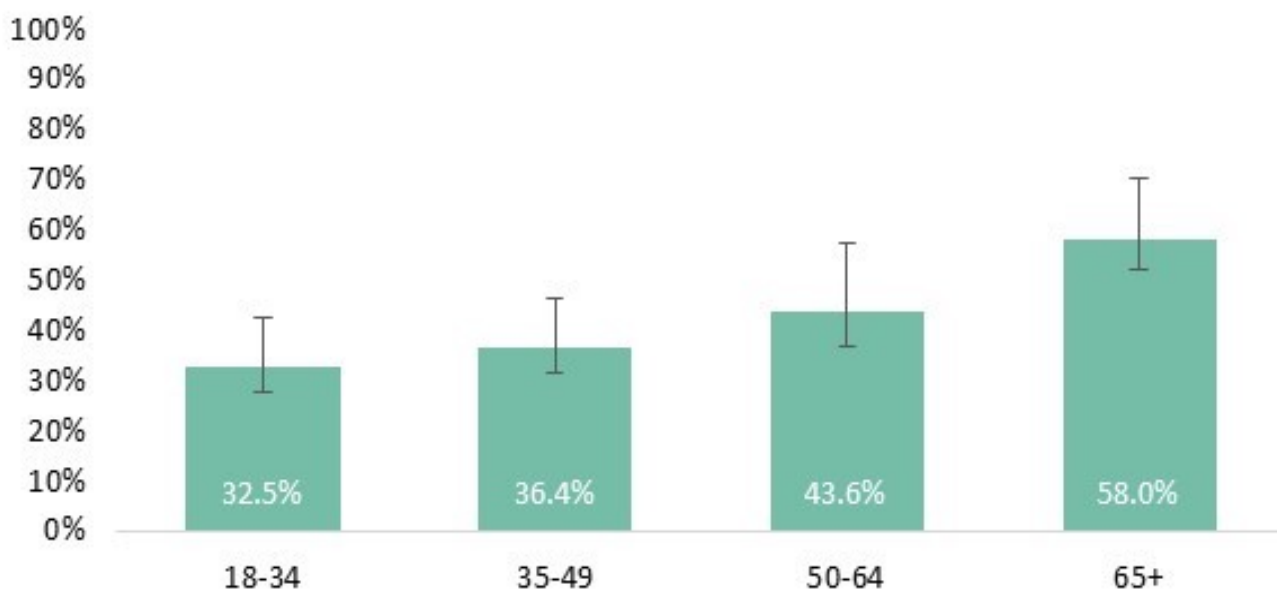
2017 Pneumococcal Vaccination (Ever Received) by Age³



2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	502	
	Total	Percent
≥3 doses DTaP	499	89.4%
≥4 doses DTaP	364	72.5%
≥3 doses Polio	433	86.3%
≥1 dose MMR	431	85.9%
≥3 doses Hib	421	83.9%
≥1 dose Hib	495	98.6%
≥3 doses Hep B	412	82.1%
Hep B Birth dose	374	74.5%
≥1 dose Varicella	423	84.3%
≥3 doses PCV	437	87.1%
≥4 doses PCV	355	70.7%
≥2 doses Hep A	313	62.4%
≥1 dose Rotavirus	392	78.1%
4:3:1	355	70.7%
4:3:1:3	350	69.7%
4:3:1:4	324	64.5%
4:3:1:3:3	334	66.5%
4:3:1:0:3:1	338	67.3%
4:3:1:3:3:1	333	66.3%
4:3:1:4:3:1	254	50.6%
4:3:1:0:3:1:4	308	61.4%
4:3:1:3:3:1:4	307	61.2%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	126	
	Total	Percent
≥1 dose DTaP	126	99.2%
≥1 dose Polio	122	96.8%
≥1 dose Hib	123	97.6%
≥1 dose Hep B	122	96.8%
≥2 doses Hep B	114	90.5%
≥1 dose PCV	126	100%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	193	
	Total	Percent
≥2 doses DTaP	132	68.4%
≥2 doses Polio	130	67.4%
≥2 doses Hib	130	67.4%
≥2 doses Hep B	176	91.2%
≥2 doses PCV	130	67.4%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, 3+ HIB, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 HIB, 3 HepB, 1 Varicella. 4:3:1:0:3:1:4= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2017 and 07/01/2018		
Total	431	
	Total	Percent
≥3 doses DTaP	267	61.9%
≥2 doses Polio	345	80.0%
≥1 dose MMR	80	18.6%
≥2 doses Hib	348	80.7%
≥3 doses Hib	224	52.0%
≥2 doses Hep B	394	91.4%
≥3 doses Hep B	287	66.6%
≥1 dose Varicella	47	10.9%
≥3 doses PCV	263	61.0%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	641	
	Total	Percent
≥3 doses DTaP	452	70.5%
≥4 doses DTaP	116	18.1%
≥3 doses Polio	441	68.8%
≥1 dose MMR	246	38.4%
≥3 doses Hib	391	61.0%
≥1 dose Hib	631	98.4%
≥3 doses Hep B	470	73.3%
≥1 dose Varicella	207	32.3%
≥3 doses PCV	448	69.9%
>4 dose PCV	206	32.1%
4:3:1	98	15.3%
4:3:1:3	95	14.8%
4:3:1:4	96	15.0%
4:3:1:3:3	92	14.4%
4:3:1:0:3	95	14.8%
4:3:1:4:3	69	10.8%
4:3:1:3:3:1	91	14.2%
4:3:1:0:3:1	94	14.7%
4:3:1:4:3:1	68	10.6%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	867	
	Total	Percent
≥3 doses DTaP	662	76.4%
≥4 doses DTaP	270	31.1%
≥3 doses Polio	641	73.9%
≥1 dose MMR	435	50.2%
≥3 doses Hib	582	67.1%
≥1 dose Hib	853	98.4%
≥3 doses Hep B	664	76.6%
≥1 dose Varicella	391	45.1%
≥3 doses PCV	651	75.1%
≥4 doses PCV	368	42.4%
4:3:1	244	28.1%
4:3:1:3	242	27.9%
4:3:1:4	238	27.5%
4:3:1:3:3	232	26.8%
4:3:1:0:3	237	27.3%
4:3:1:4:3	179	20.6%
4:3:1:3:3:1	230	26.5%
4:3:1:0:3:1	235	27.1%
4:3:1:4:3:1	177	20.4%
4:3:1:3:3:1:4	224	25.8%

12–17 Years of Age ⁵							
Children in USIIS born between 07/02/2000 and 07/01/2006							
Total^		4,309	Female Total		2,025	Male Total	2,250
	Total	Total %	Female Total	Female %	Male Total	Male %	
1 HPV	1,829	42.4%	945	46.7%	873	38.8%	
2 HPV	966	22.4%	511	25.2%	449	20.0%	
3 HPV	355	8.2%	210	10.4%	144	6.4%	

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	4,309	
	Total	Percent
≥1 dose Meningococcal	3,013	69.9%
≥1 Tdap	3,365	78.1%
≥1 Varicella	3,969	92.1%
≥2 Varicella	3,376	78.3%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	1,406	
	Total	Percent
≥2 dose Meningococcal	158	11.2%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	12,120	
	Total	Percent
≥1 dose Influenza in lifetime	7,677	63.3%
≥1 dose Influenza last flu season*	3,011	24.8%

^Total also includes individuals with an unknown gender in USIIS. *Last flu season between 07/01/2017 and 6/30/2018. . 107

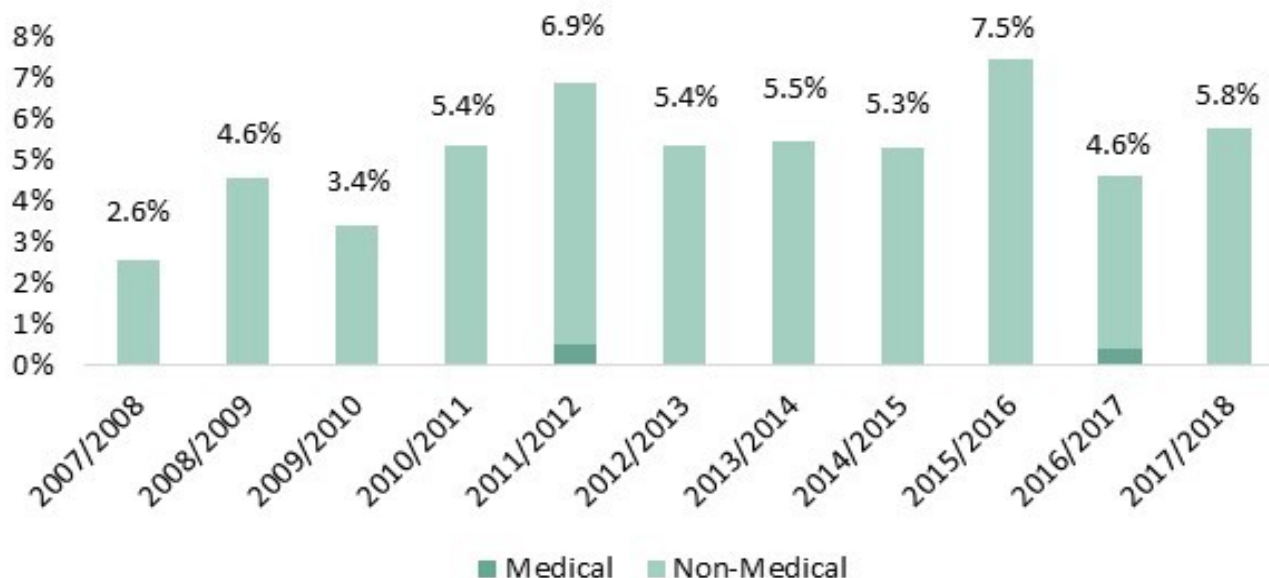
Adequately Immunized by School District 2017²

Wasatch		
	Adequately Immunized	Total Exemptions
Kindergarten School Entry	89.5%	5.8%
Second-Dose Measles (K-12)	95.3%	4.4%
7th Grade Entry	93.9%	6.1%

Immunized for Child Care 2016²

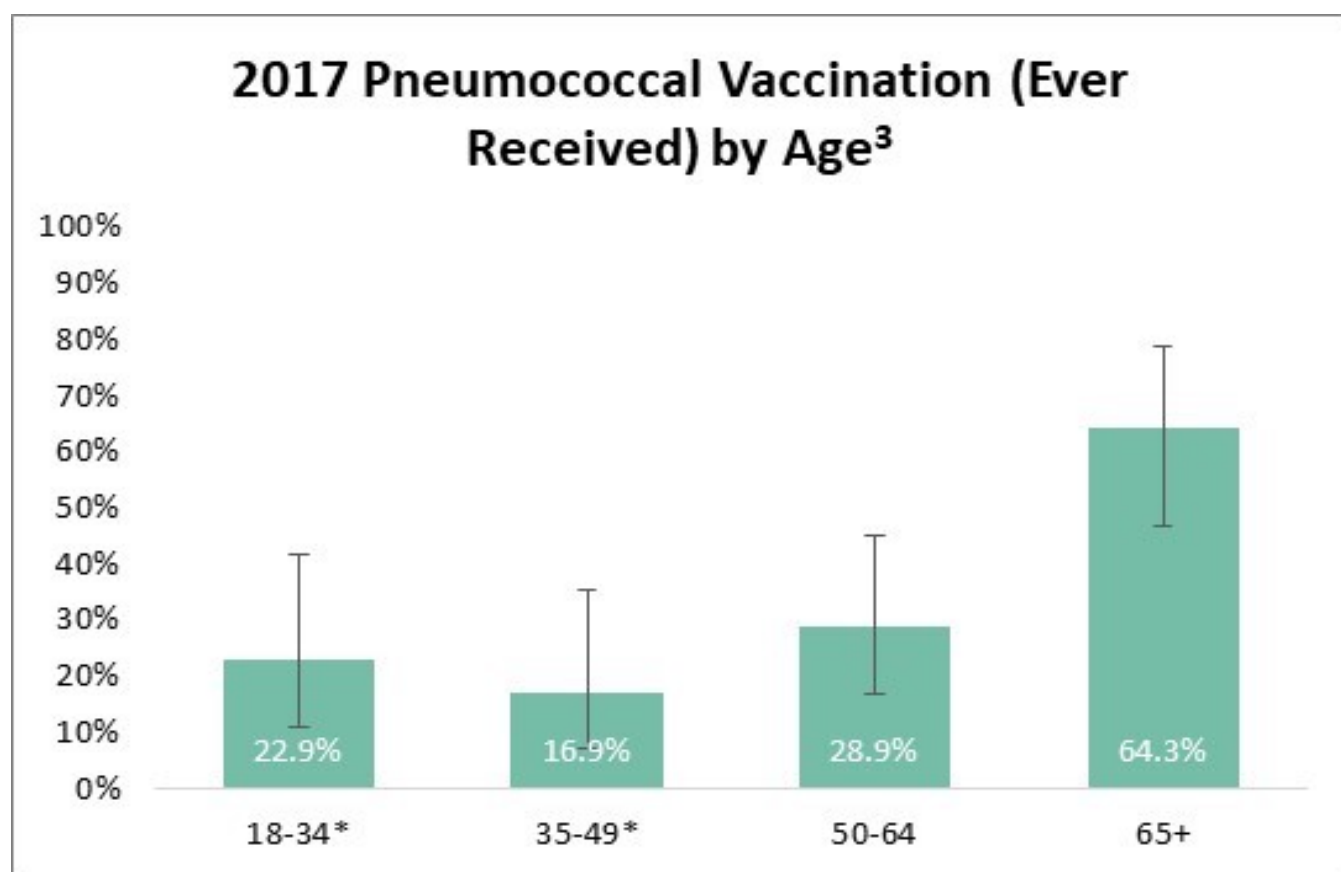
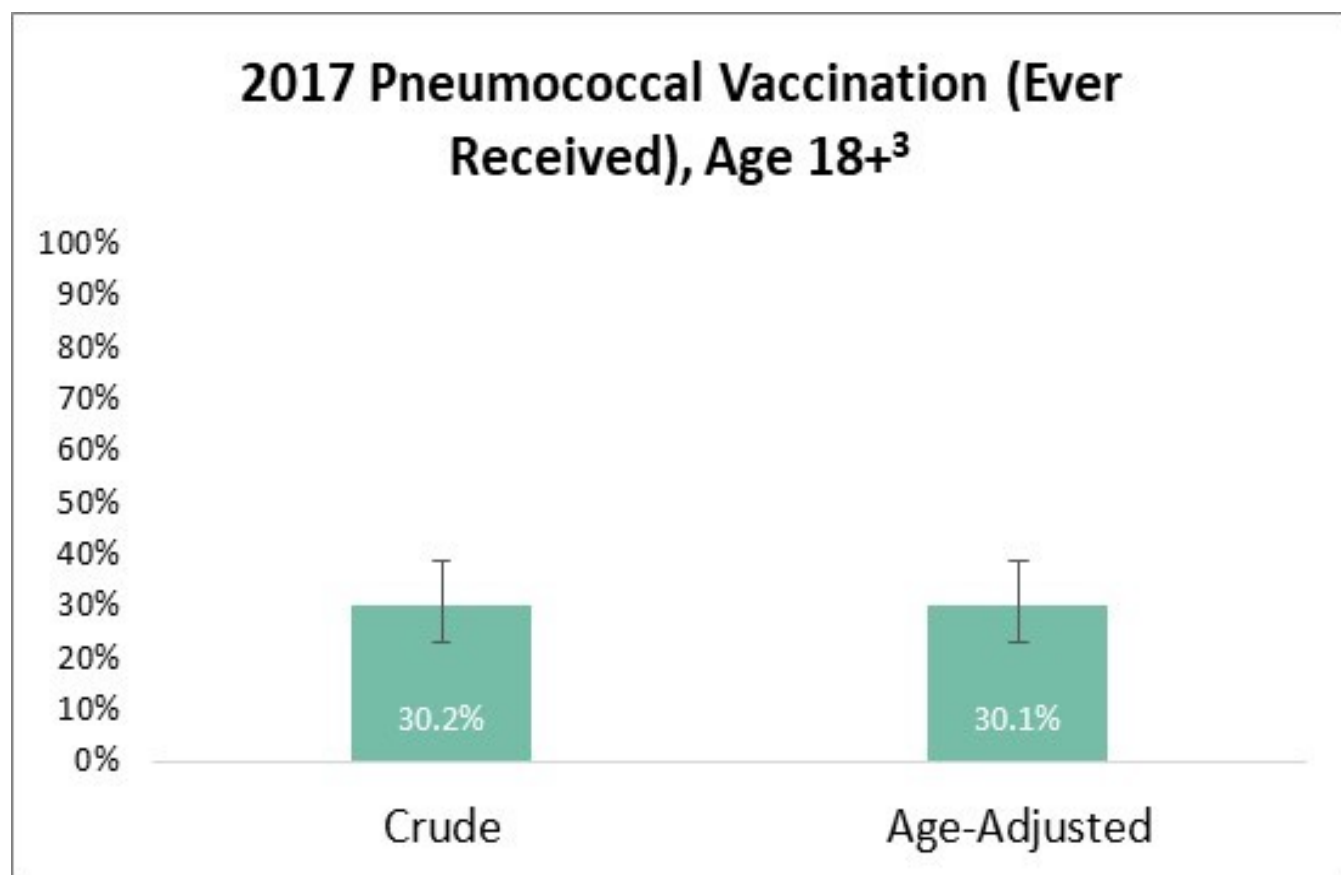
	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	96.2%	1.9%
Head Start Centers	N/A	N/A

Kindergarten Exemptions by Type, 2007-2017²

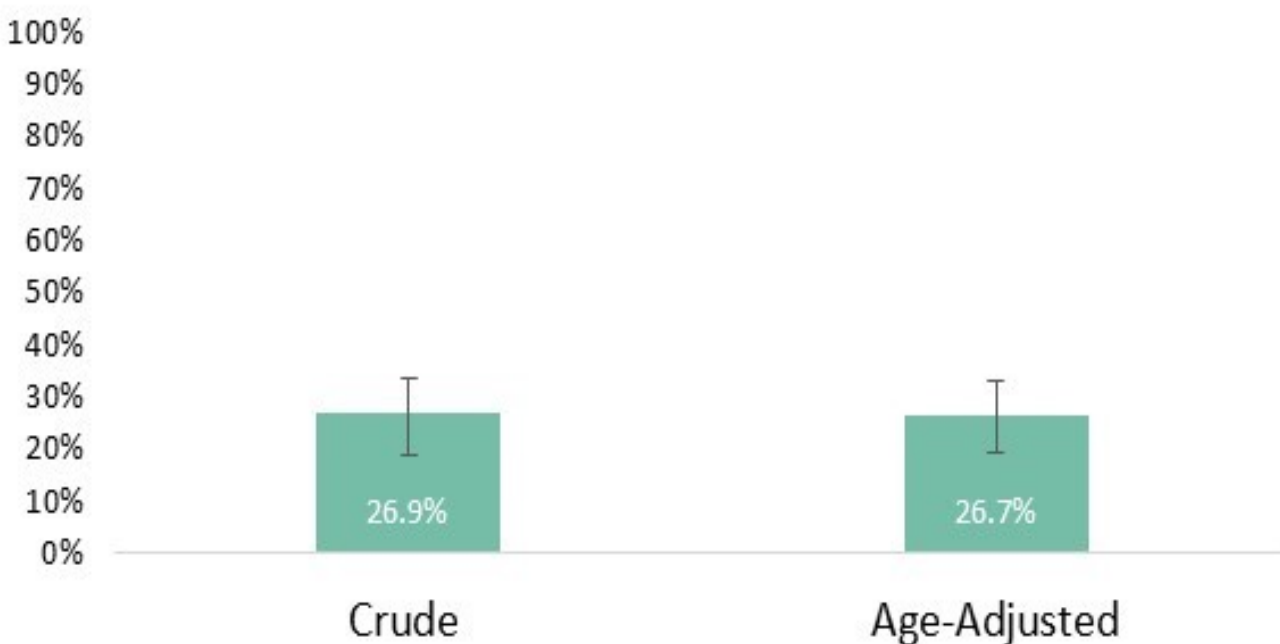


≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	21,406	
	Total	Percent
≥1 dose Influenza last season*	5,867	27.4%
≥1 dose influenza in lifetime	13,701	64.0%
≥1 TDaP	11,945	55.8%
≥1 Varicella	2,501	11.7%
≥1 HPV	1,095	5.1%
≥1 Zoster**	448	2.1%
≥1 MMR	6,788	31.7%
≥1 PCV13	2,569	12.0%
≥1PPSV23	2,644	12.4%
≥1 Hep A	7,822	36.5%
≥1 Hep B	8,166	38.1%
≥1 Meningococcal	3,346	15.6%
≥1 HIB	3,954	18.5%

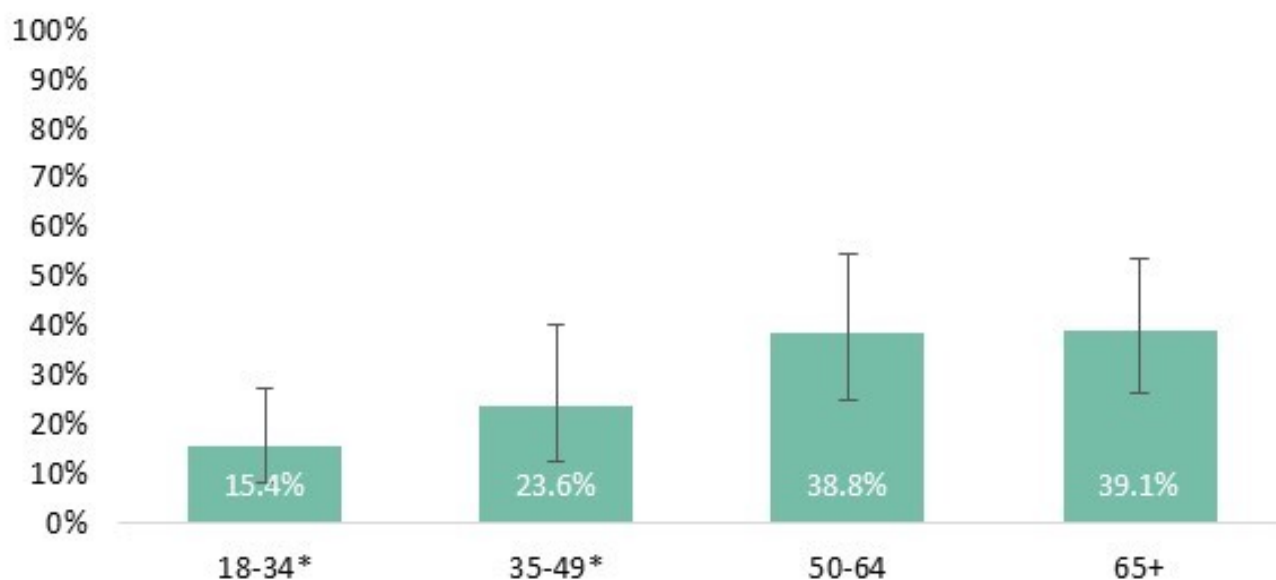
*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

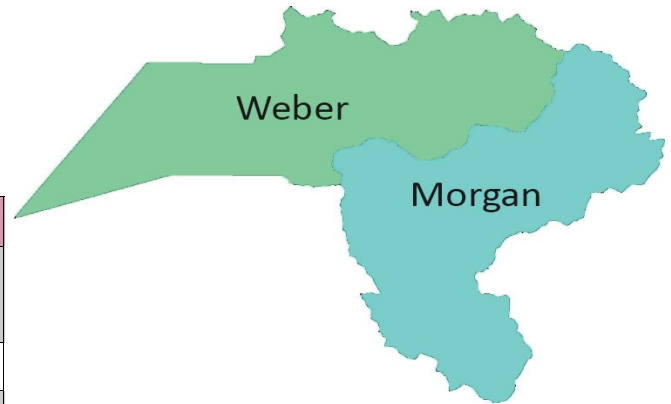


2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Early Childhood Immunization

24–35 months of Age ⁵		
Children in USIIS born between 07/02/2015 and 07/01/2016		
Total	4,250	
	Total	Percent
≥3 doses DTaP	3,959	93.2%
≥4 doses DTaP	3,520	82.8%
≥3 doses Polio	3,924	92.3%
≥1 dose MMR	3,892	91.6%
≥3 doses Hib	3,916	92.1%
≥1 dose Hib	4,212	99.1%
≥3 doses Hep B	3,896	91.7%
Hep B Birth dose	3,727	87.7%
≥1 dose Varicella	3,874	91.2%
≥3 doses PCV	3,913	92.1%
≥4 doses PCV	3,469	81.6%
≥2 doses Hep A	3,041	71.6%
≥1 dose Rotavirus	3,943	92.8%
4:3:1	3,471	81.7%
4:3:1:3	3,460	81.4%
4:3:1:4	3,312	77.9%
4:3:1:3:3	3,408	80.2%
4:3:1:0:3:1	3,404	80.1%
4:3:1:3:3:1	3,394	79.9%
4:3:1:4:3:1	3,140	73.9%
4:3:1:0:3:1:4	3,262	76.8%
4:3:1:3:3:1:4	3,262	76.8%

≤3 months of Age ⁵		
Children in USIIS born between 03/02/2018 and 07/01/2018		
Total	1,200	
	Total	Percent
≥1 dose DTaP	1,187	98.9%
≥1 dose Polio	1,178	98.2%
≥1 dose Hib	1,181	98.4%
≥1 dose Hep B	1,185	98.8%
≥2 doses Hep B	1,112	92.7%
≥1 dose PCV	1,182	98.5%

≤5 months of Age ⁵		
Children in USIIS born between 01/02/2018 and 07/01/2018		
Total	1,762	
	Total	Percent
≥2 doses DTaP	1,214	68.9%
≥2 doses Polio	1,207	68.5%
≥2 doses Hib	1,217	69.1%
≥2 doses Hep B	1,651	93.7%
≥2 doses PCV	1,203	68.3%

Source: USIIS. Service area results may vary due to provider facility participation. 4:3:1 = 4+DTaP, 3+Polio, 1+MMR. 4:3:1:3 = 4+DTaP, 3+Polio, 1+MMR, 3+ PCV. 4:3:1:4= 4+DTaP, 3+Polio, 1+MMR, 4 PCV. 4:3:1:3:3 = 4+DTaP, 3+Polio, 1+MMR, full HIB series, 3+HepB. 4:3:1:0:3:1= 4 DTaP, 3 Polio, 1 MMR, 0 HIB, 3 HepB, 1 Varicella . 4:3:1:3:3:1 = 4+DTaP, 3+Polio, 1+MMR, full HIB series, 3+HepB, 1+Varicella. 4:3:1:4:3:1= 4 DTaP, 3 Polio, 1 MMR, 4 PCV, 3 HepB, 1 Varicella. 4:3:1:3:3:1:4 = Same as 4:3:1:3:3:1, adding 4PCV.

<13 Months of Age ⁵		
Children in USIIS born between 06/02/2018 and 07/01/2018		
Total	4,010	
	Total	Percent
≥3 doses DTaP	2,467	61.5%
≥2 doses Polio	3,301	82.3%
≥1 dose MMR	920	22.9%
≥2 doses Hib	3,316	82.7%
≥3 doses Hib	2,381	59.4%
≥2 doses Hep B	3,810	95.0%
≥3 doses Hep B	2,584	64.4%
≥1 dose Varicella	914	22.8%
≥3 doses PCV	2,481	61.9%

<19 Months of Age ⁵		
Children in USIIS born between 12/02/2016 and 07/01/2018		
Total	5,938	
	Total	Percent
≥3 doses DTaP	4,229	71.2%
≥4 doses DTaP	1,445	24.3%
≥3 doses Polio	4,198	70.7%
≥1 dose MMR	2,554	43.0%
≥3 doses Hib	4,119	69.4%
≥1 dose Hib	5,888	99.2%
≥3 doses Hep B	4,317	72.7%
≥1 dose Varicella	2,538	42.7%
≥3 doses PCV	4,229	71.2%
>4 dose PCV	2,314	39.0%
4:3:1	1,411	23.8%
4:3:1:3	1,409	23.7%
4:3:1:4	1,374	23.1%
4:3:1:3:3	1,406	23.7%
4:3:1:0:3	1,408	23.7%
4:3:1:4:3	1,299	21.9%
4:3:1:3:3:1	1,403	23.6%
4:3:1:0:3:1	1,405	23.7%
4:3:1:4:3:1	1,297	21.8%

<24 Months of Age ⁵		
Children in USIIS born between 07/02/2016 and 07/01/2018		
Total	7,689	
	Total	Percent
≥3 doses DTaP	5,854	76.1%
≥4 doses DTaP	2,819	36.7%
≥3 doses Polio	5,814	75.6%
≥1 dose MMR	4,095	53.3%
≥3 doses Hib	5,728	74.5%
≥1 dose Hib	7,634	99.3%
≥3 doses Hep B	5,927	77.1%
≥1 dose Varicella	4,081	53.1%
≥3 doses PCV	5,847	76.0%
≥4 doses PCV	3,721	48.4%
4:3:1	2,752	35.8%
4:3:1:3	2,782	36.2%
4:3:1:4	2,697	35.1%
4:3:1:3:3	2,744	35.7%
4:3:1:0:3	2,748	35.7%
4:3:1:4:3	2,521	32.8%
4:3:1:3:3:1	2,738	35.6%
4:3:1:0:3:1	2,742	35.7%
4:3:1:4:3:1	2,517	32.7%
4:3:1:3:3:1:4	2,654	34.5%

12–17 Years of Age ⁵						
Children in USIIS born between 07/02/2000 and 07/01/2006						
	Total [^]	32,137	Female Total	15,648	Male Total	16,391
	Total	Total %	Female Total	Female %	Male Total	Male %
1 HPV	16,641	51.8%	8,654	55.3%	7,963	48.6%
2 HPV	10,852	33.8%	5,813	37.1%	5,026	30.7%
3 HPV	5,803	18.1%	3,278	20.9%	2,520	15.4%

12–17 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2006		
Total	32,137	
	Total	Percent
≥1 dose Meningococcal	23,215	72.2%
≥1 Tdap	24,640	76.7%
≥1 Varicella	28,572	88.9%
≥2 Varicella	23,893	74.3%

16–18 Years of Age ⁵		
Children in USIIS born between 07/02/2000 and 07/01/2002		
Total	10,719	
	Total	Percent
≥2 dose Meningococcal	2,073	19.3%

≤18 Years of Age ⁵		
Children in USIIS born after 07/2/1999		
Total	93,360	
	Total	Percent
≥1 dose Influenza in lifetime	62,341	66.8%
≥1 dose Influenza last flu season*	27,354	29.3%

[^]Total also includes individuals with an unknown gender in USIIS. *Last flu season between 7/1/17 and 6/30/18.

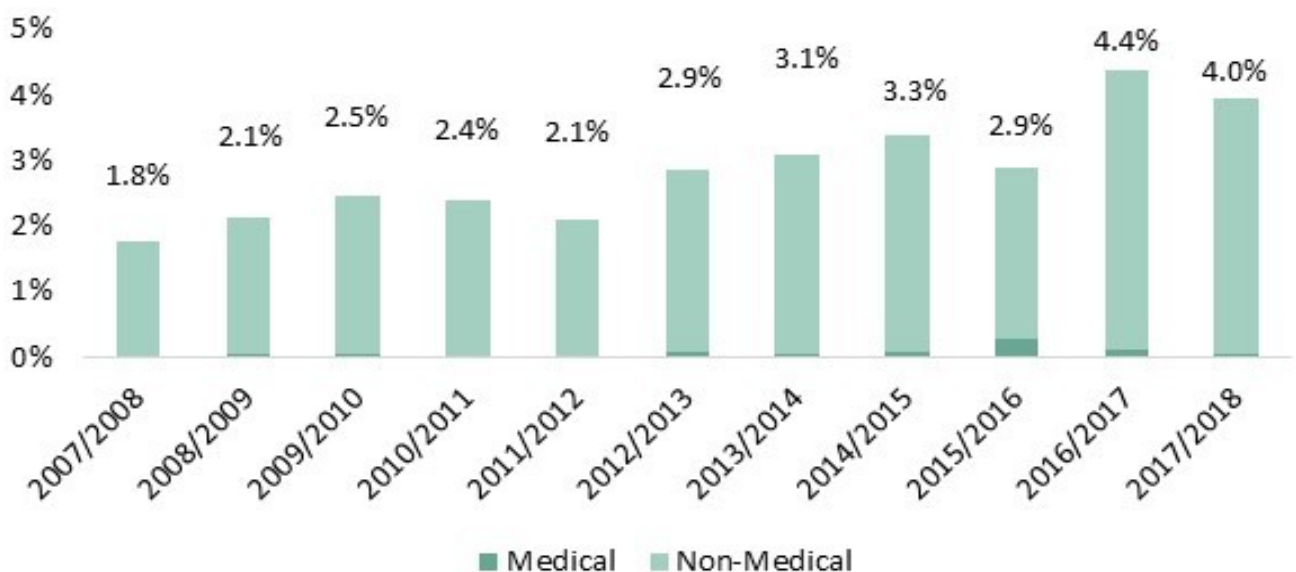
Adequately Immunized by School District 2017²

	Morgan		Ogden		Weber	
	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	97.2%	1.9%	90.6%	2.1%	93.3%	3.3%
Second-Dose Measles (K-12)	94.9%	5.1%	97.8%	1.6%	97.5%	2.4%
7th Grade Entry	94.0%	6.1%	92.3%	2.3%	95.0%	2.9%

Immunized for Child Care 2017²

	Adequately Immunized	Total Exemptions
Licensed Child Care Facilities	92.3%	2.1%
Head Start Centers	92.5%	1.0%

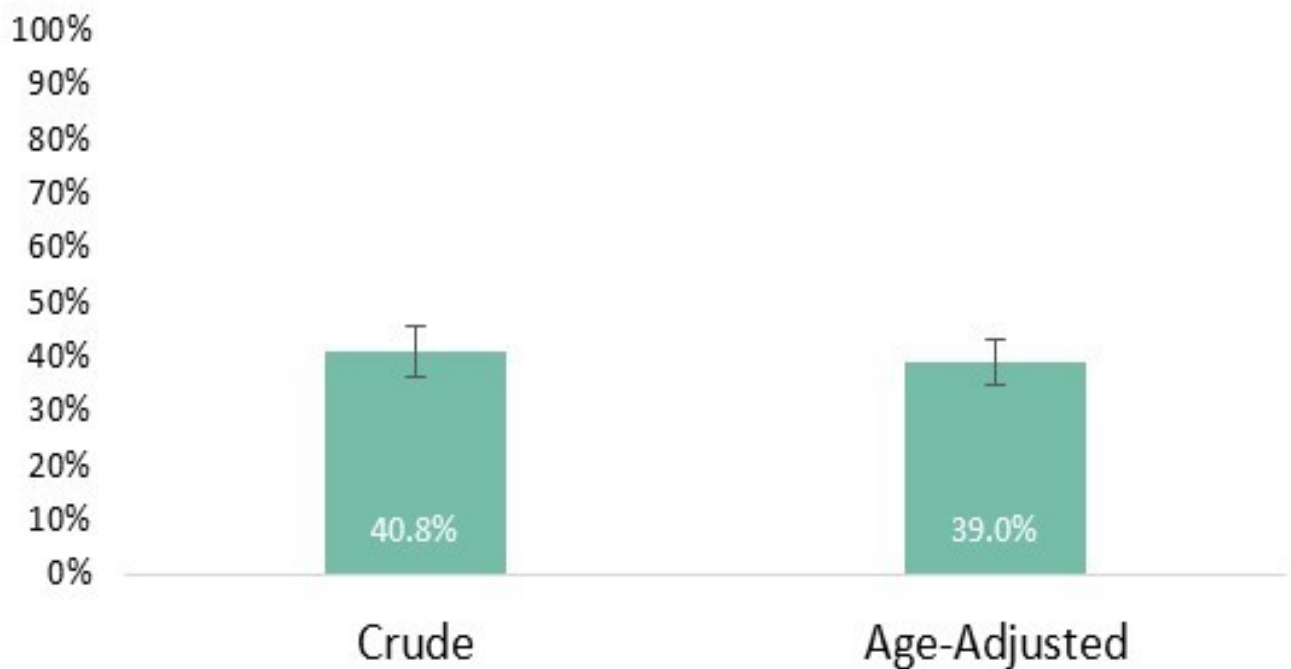
Kindergarten Exemptions by Type, 2007-2017²



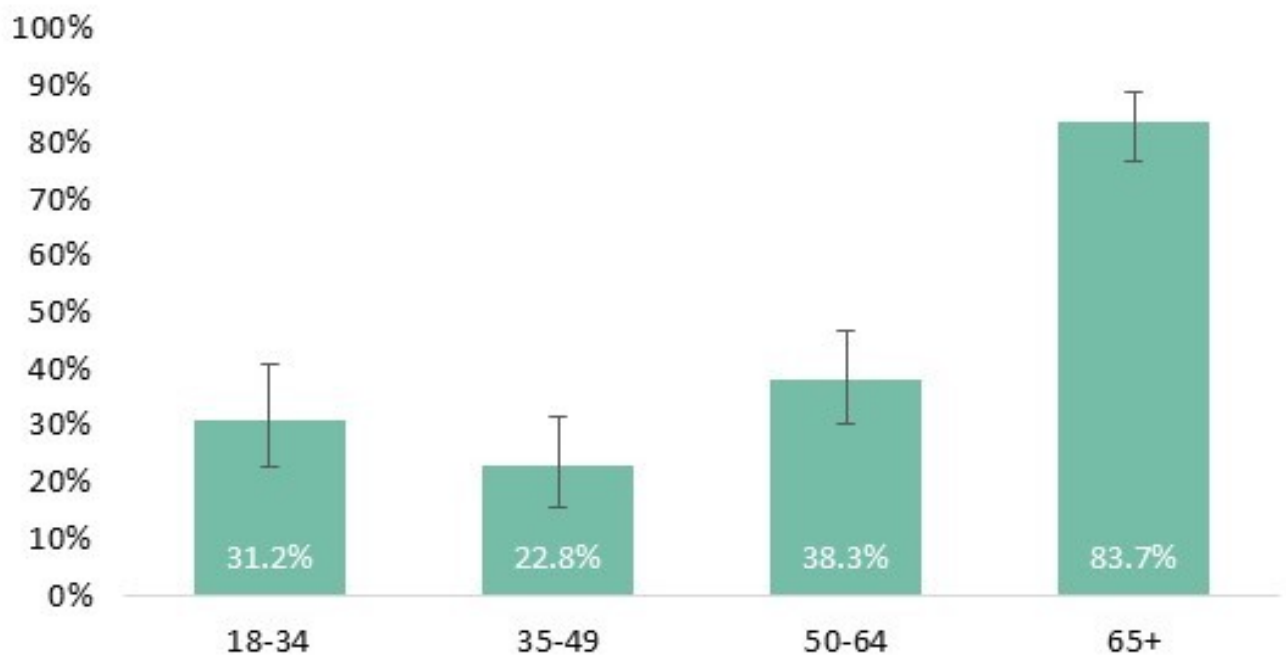
≥19 Years of Age⁵		
Adults in USIIS born on or before 07/1/1999		
Total	192,428	
	Total	Percent
≥1 dose Influenza last season*	50,294	26.1%
≥1 dose influenza in lifetime	111,648	58.0%
≥1 TDaP	92,573	48.1%
≥1 Varicella	19,961	10.4%
≥1 HPV	13,380	7.0%
≥1 Zoster**	3,231	1.7%
≥1 MMR	59,788	31.1%
≥1 PCV13	22,700	11.8%
≥1PPSV23	25,223	13.1%
≥1 Hep A	50,331	26.2%
≥1 Hep B	67,059	34.8%
≥1 Meningococcal	22,812	11.9%
≥1 HIB	31,756	16.5%

*Last flu season between 07/01/2017 and 6/30/2018. **Shingrix was approved by the FDA in October 2017. Since then, the CDC has recommended Shingrix over Zostavax for the prevention of herpes zoster. The zoster coverage reflects those who have received at least one Shingrix vaccine and does not include Zostavax. Previous reports have included Zostavax, therefore coverage rates are not comparable with previous reports.

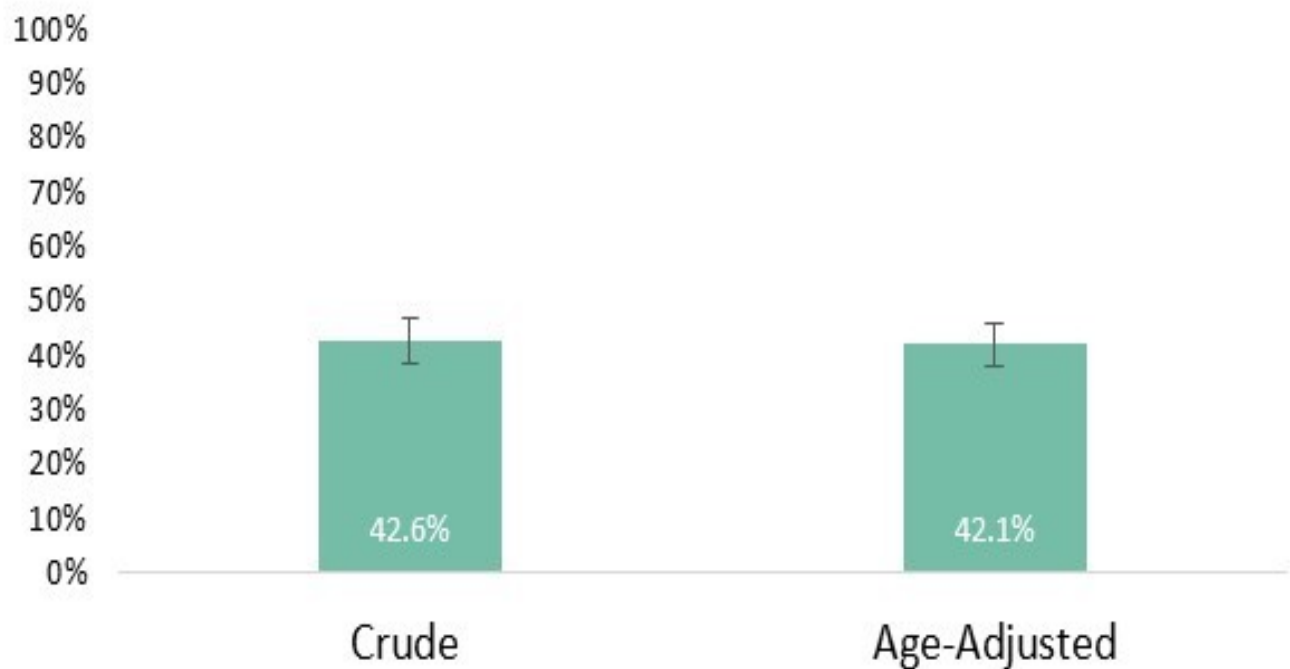
2017 Pneumococcal Vaccination (Ever Received), Age 18+³



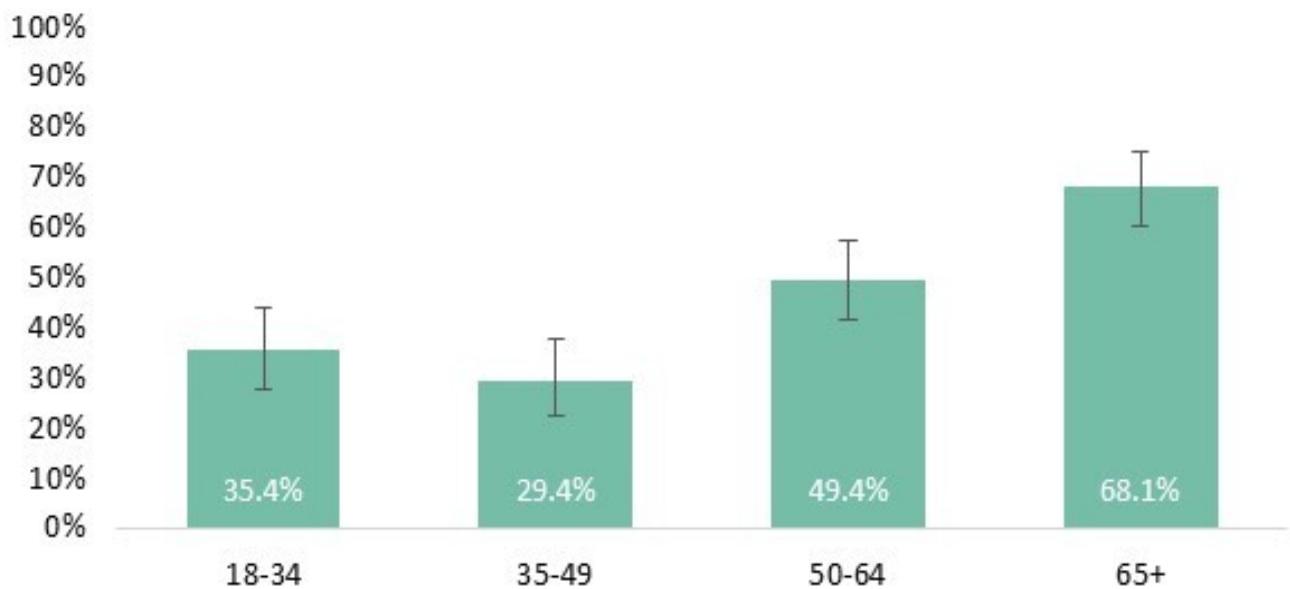
2017 Pneumococcal Vaccination (Ever Received) by Age³



2017 Influenza Vaccination (Within the Past Year), Age 18+³



2017 Influenza Vaccination (Within the Past Year) by Age³



Appendix A: AFIX (Assessment, Feedback, Incentive, eXchange)

The Utah Immunization Program (UIP) provides quality feedback to providers regarding its yearly immunization rate assessments through a program called AFIX (Assessment, Feedback, Incentive, eXchange). Our goal is to increase and maintain immunization coverage levels in public and private health care provider facilities throughout Utah by assessing the immunization coverage levels and delivery patterns at the provider level.

Vaccines for Children (VFC) Provider Relations Representatives conduct assessments in at least 25% of private and public health care facilities throughout Utah. These assessments are targeted to clinics where there will be a large impact on the community (highest volume) as well as clinics whose previous rates have been in the bottom quartile.

Childhood assessments measure the 4:3:1:3:3:1:4 series as well as single antigen rates (4 DTap, 3 Polio, 1 MMR, UTD Hib, UTD Hep B, 1 Varicella, UTD PCV, UTD Rotavirus, 2 Hepatitis A, and 1 influenza [prior season]) at 24 months of age. Adolescent assessments measure 13–17 year olds as of the assessment date for the following vaccines: UTD Hepatitis B, 2 MMR, 1 Tdap, 2 Varicella, UTD Meningococcal, and UTD HPV. All data is accessed from the Utah Statewide Immunization Information System (USIIS) and active patients are considered to be any patient who has been seen in the clinic for an immunization in the past year as of the assessment date.

HPV education has continued to be a focus in most clinics with all offices receiving updated HPV parent educational tear off sheets. Provider relations staff review the clinic rates in detail, including HPV rates. Providers are given suggestions on how to improve and ultimately decide what measures they feel their clinic would reasonably be able to implement.

Reporting for AFIX to CDC has changed this year, so visits will now be measured from July to July. As of October 18, 2018, 59 AFIX visits have been conducted since July 1, 2018. There were also 26 visits conducted from January 1, 2018 to June 20, 2018. Visits included an in-depth feedback session along with a questionnaire which provides guidance to making decisions on proven quality improvement strategies. Feedback sessions provide an opportunity for office staff to discuss strategies for improving immunization coverage rates with UIP staff. UIP staff is available to provide suggestions and data, but ultimately, each clinic must decide what activities are appropriate to use to increase the vaccination coverage levels in their clinic.

According to the questionnaire data:

Top childhood strategies not currently being implemented include:

- Inactivating patients in the IIS who are no longer seen by the practice.
- Reminder recall system for pediatric patients.
- Contacting patient/parents within 3-5 days when a “well-child” or “immunization only” visit is a “no show” to reschedule it for as soon as possible?

Top childhood strategies selected for implementation include:

- Inactivating patients in the IIS who are no longer seen by the practice.
- Training staff, including front desk, on scheduling immunization visits, ACIP recommendations, and minimum intervals.
- Schedule the next vaccination visit before the patients/parents leave the office.

Appendix A: *AFIX (Assessment, Feedback, Incentive, eXchange)*

Top adolescent strategies not currently being implemented include:

- Inactivating patients in the IIS who are no longer seen by the practice.
- Having a system in place to schedule wellness visits for patients at 11-12 years of age.
- Scheduling the next vaccination visit before the patients/parents leave the office.

Top adolescent strategies selected for implementation include:

- Inactivating patients in the IIS who are no longer seen by the practice.
- Training staff, including front desk, on scheduling immunization visits, ACIP recommendations, and minimum intervals.
- Putting a system in place to schedule wellness visits for 11-12 year olds.

Follow-up takes place within six months of the visit. Rates are re-run and compared with initial visit. If there has been incomplete implementation of goals, a subsequent follow up will take place within an appropriately scheduled time.

IMMUNIZATION REPORT FOR LONG-TERM CARE FACILITIES

Long-term care facilities are required to report the influenza and pneumococcal immunization status of patients and the influenza and hepatitis B immunization status of employees to the Utah Immunization Program. Completion of the annual report is necessary to prevent sanctioning of a facility's license.

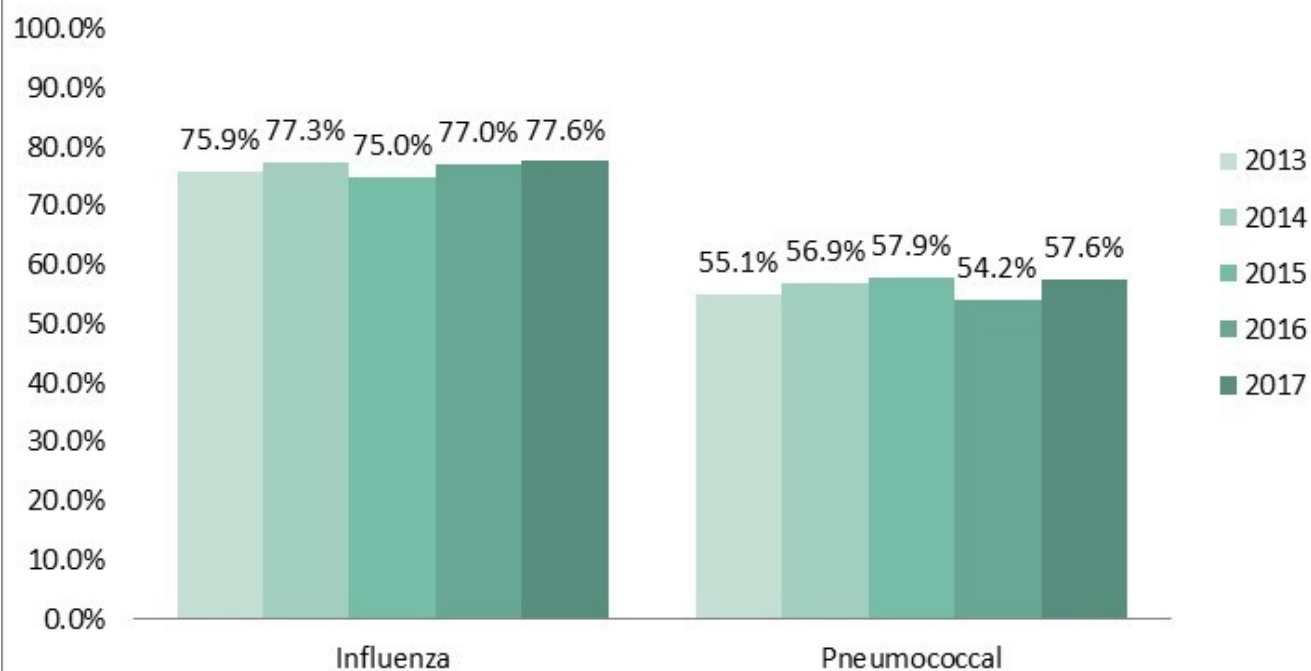
The report includes persons who are residents or employees of a facility between October 1 and December 31 of the survey year. The survey is completed online no later than January 31 of the following year. Facilities reporting include hospitals (swing beds and transitional care beds), nursing care facilities, small healthcare facilities, and type I and type II assisted living facilities. There were 357 licensed facilities in 2017; all but one facility reported for 2017.

The portion of the survey reported here is as follows:

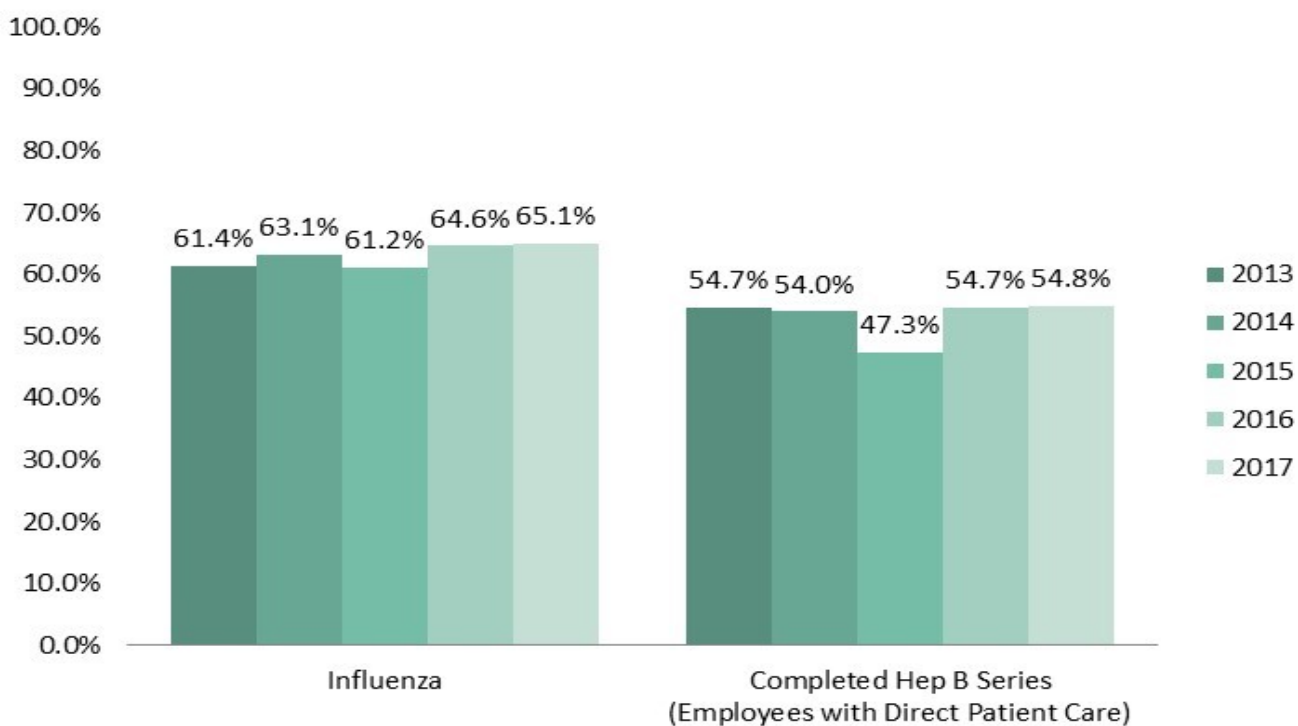
- *Influenza (flu) immunizations*: given during the reporting time period for residents and employees;
- *Pneumococcal immunizations*: given at any time for residents only; and
- *Hepatitis B immunizations*: given at any time to an employee having direct patient contact.

State of Utah: 356 Facilities			
Residents and Employees Immunized in Long-term Care Facilities			
Residents	Total	Flu	Pneumococcal
	18,881	77.6%	57.6%
All Employees	Total	Flu	Hepatitis B
	21,409	65.1%	N/A
Employees with Direct Patient Care	17,055	N/A	54.8%

Resident Immunizations in Long-Term Care Facilities⁴



Employee Immunizations in Long-Term Care Facilities⁴



Bear River: 20 Facilities

Residents	Number	Flu	Pneumococcal
	1,001	79.9%	60.0%
All Employees	Number	Flu	Hepatitis B
	1,147	60.6%	N/A
Employees with Direct Patient Care	929	N/A	46.8%

Central: 21 Facilities

Residents	Number	Flu	Pneumococcal
	530	82.5%	69.4%
All Employees	Number	Flu	Hepatitis B
	1,333	91.4%	N/A
Employees with Direct Patient Care	1,154	N/A	78.8%

Davis County: 33 Facilities

Residents	Number	Flu	Pneumococcal
	2,081	79.3%	50.9%
All Employees	Number	Flu	Hepatitis B
	2,079	67.6%	N/A
Employees with Direct Patient Care	1,632	N/A	58.3%

Salt Lake County: 108 Facilities

Residents	Number	Flu	Pneumococcal
	7,042	77.0%	55.9%
All Employees	Number	Flu	Hepatitis B
	6,459	59.7%	N/A
Employees with Direct Patient Care	5,147	N/A	43.0%

San Juan: 0 Facilities

Residents	Number	Flu	Pneumococcal
	N/A	N/A	N/A
All Employees	Number	Flu	Hepatitis B
	N/A	N/A	N/A
Employees with Direct Patient Care	N/A	N/A	N/A

Southeast: 8 Facilities			
Residents	Number	Flu	Pneumococcal
	316	80.7%	53.5%
All Employees	Number	Flu	Hepatitis B
	491	76.8%	N/A
Employees with Direct Patient Care	349	N/A	45.3%

Southwest: 47 Facilities			
Residents	Number	Flu	Pneumococcal
	1,925	73.8%	55.0%
All Employees	Number	Flu	Hepatitis B
	2,555	66.6%	N/A
Employees with Direct Patient Care	2,052	N/A	59.9%

Summit County: 2 Facilities			
Residents	Number	Flu	Pneumococcal
	43	97.7%	79.1%
All Employees	Number	Flu	Hepatitis B
	37	45.9%	N/A
Employees with Direct Patient Care	23	N/A	52.2%

Tooele County: 5 Facilities			
Residents	Number	Flu	Pneumococcal
	339	92.0%	84.4%
All Employees	Number	Flu	Hepatitis B
	635	79.2%	N/A
Employees with Direct Patient Care	505	N/A	67.1%

TriCounty: 7 Facilities			
Residents	Number	Flu	Pneumococcal
	241	82.6%	78.8%
All Employees	Number	Flu	Hepatitis B
	557	76.5%	N/A
Employees with Direct Patient Care	420	N/A	94.0%

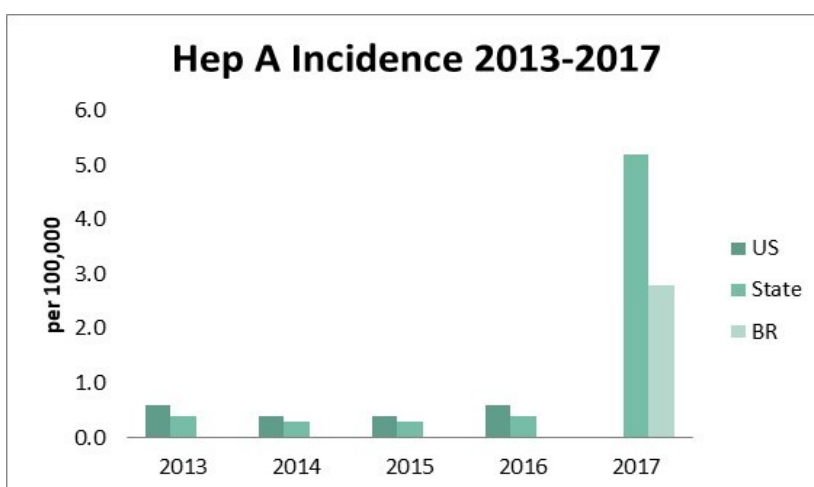
Utah County: 72 Facilities			
Residents	Number	Flu	Pneumococcal
	3,312	76.3%	57.0%
All Employees	Number	Flu	Hepatitis B
	3,964	56.2%	N/A
Employees with Direct Patient Care	3,084	N/A	49.9%

Wasatch County: 4 Facilities			
Residents	Number	Flu	Pneumococcal
	158	61.4%	62.0%
All Employees	Number	Flu	Hepatitis B
	300	78.7%	N/A
Employees with Direct Patient Care	260	N/A	71.5%

Weber-Morgan: 29 Facilities			
Residents	Number	Flu	Pneumococcal
	1,893	78.6%	62.9%
All Employees	Number	Flu	Hepatitis B
	1,852	69.2%	N/A
Employees with Direct Patient Care	1,500	N/A	65.1%

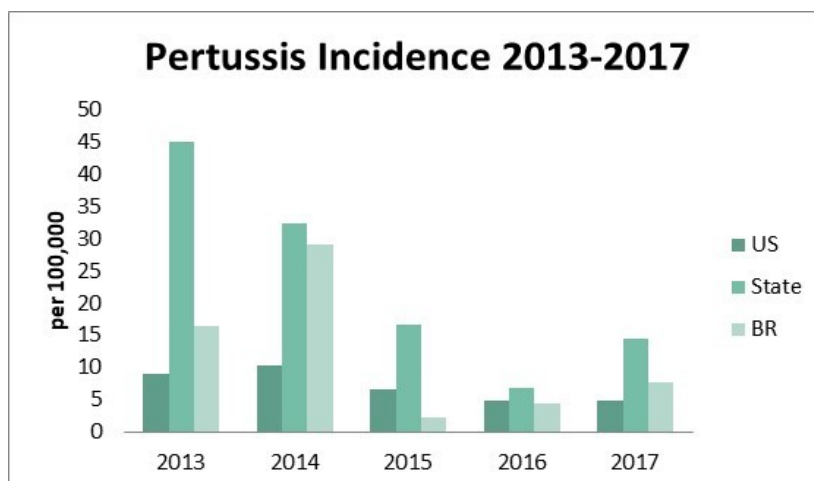
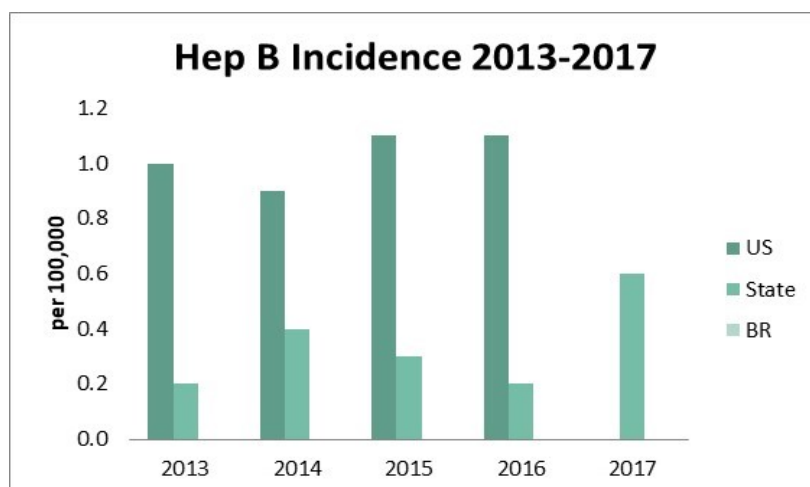
Bear River

Hepatitis A, hepatitis B, and pertussis are preventable through immunization. Trends in vaccine-preventable diseases are tracked with the intent that the data can be helpful in developing collaborative immunization campaign efforts. The following data were provided by the Bureau of Epidemiology, Utah Department of Health, for statewide and local health districts. National data were obtained from the CDC. The 2017 U.S. rates were estimated from CDC provisional data. U.S. data from 2017 should be viewed as only an estimate.



Hepatitis A			
Year	U.S.	Utah	BR
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	2.8

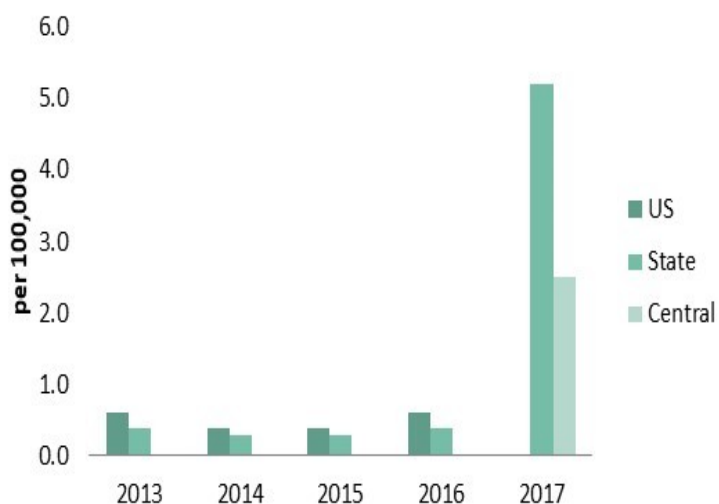
Hepatitis B			
Year	U.S.	Utah	BR
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0



Pertussis			
Year	U.S.	Utah	BR
2013	9.1	45.1	16.5
2014	10.3	32.4	29.0
2015	6.5	16.6	2.3
2016	4.9	6.9	4.5
2017	4.9	14.4	7.7

Central

Hep A Incidence 2013-2017



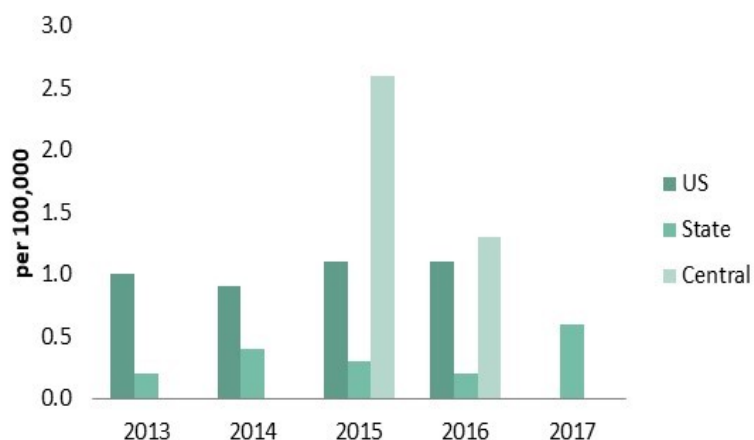
Hepatitis A

Year	U.S.	Utah	Central
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	2.5

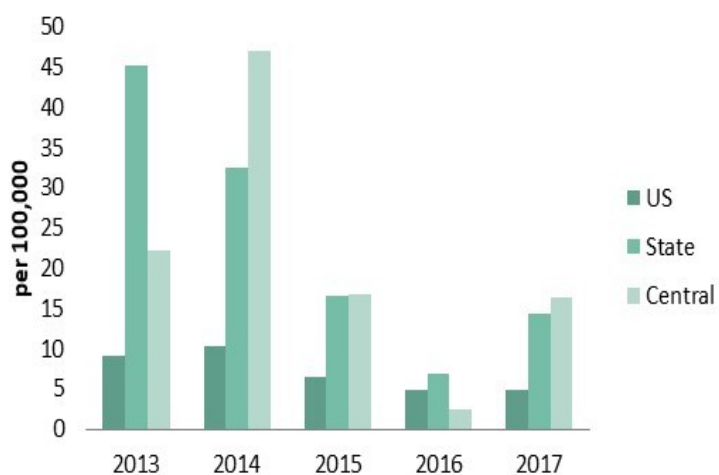
Hepatitis B

Year	U.S.	Utah	Central
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	2.6
2016	1.1	0.2	1.3
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

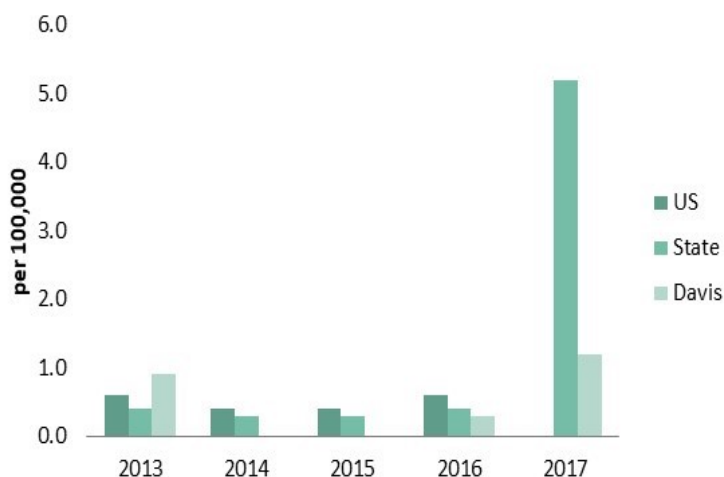


Pertussis

Year	U.S.	Utah	Central
2013	9.1	45.1	22.3
2014	10.3	32.4	47.0
2015	6.5	16.6	16.8
2016	4.9	6.9	2.5
2017	4.9	14.4	16.3

Davis County

Hep A Incidence 2013-2017



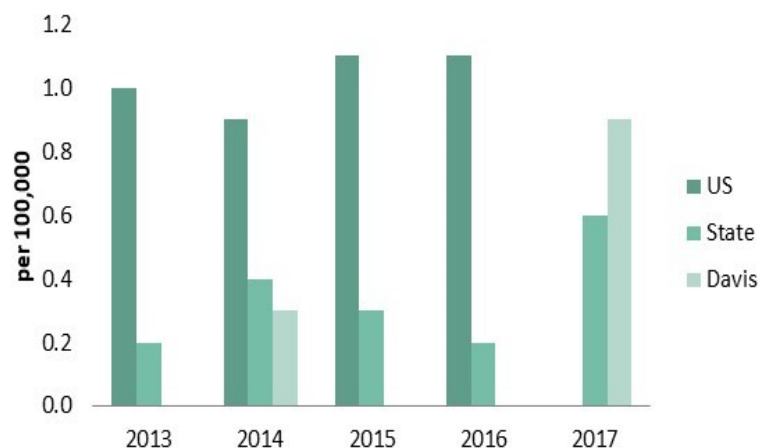
Hepatitis A

Year	U.S.	Utah	Davis
2013	0.6	0.4	0.9
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.3
2017	N/A	5.2	1.2

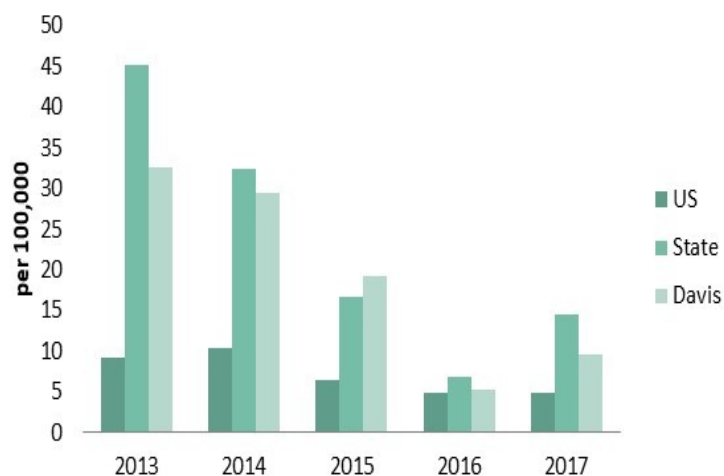
Hepatitis B

Year	U.S.	Utah	Davis
2013	1.0	0.2	0.0
2014	0.9	0.4	0.3
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.9

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

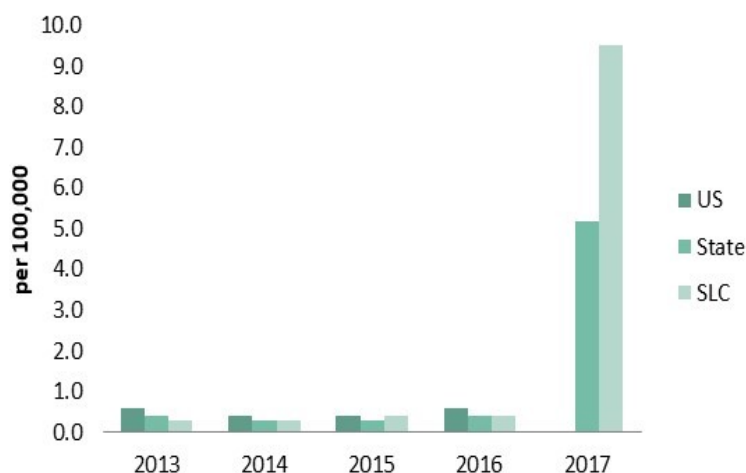


Pertussis

Year	U.S.	Utah	Davis
2013	9.1	45.1	32.6
2014	10.3	32.4	29.4
2015	6.5	16.6	19.3
2016	4.9	6.9	5.3
2017	4.9	14.4	9.5

Salt Lake County

Hep A Incidence 2013-2017



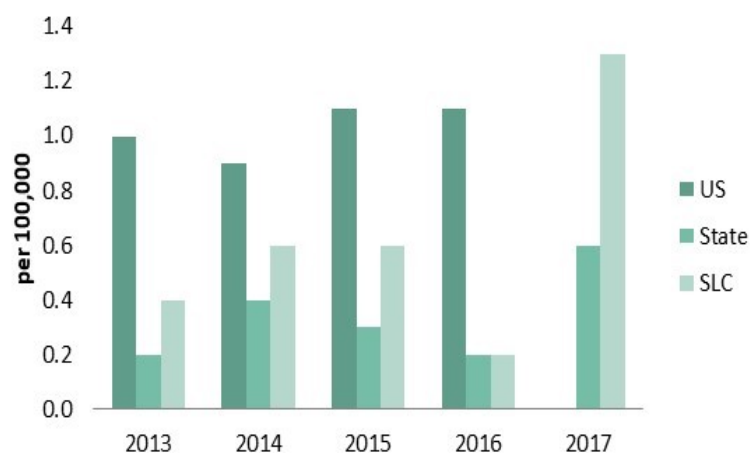
Hepatitis A

Year	U.S.	Utah	SLC
2013	0.6	0.4	0.3
2014	0.4	0.3	0.3
2015	0.4	0.3	0.4
2016	0.6	0.4	0.4
2017	N/A	5.2	9.5

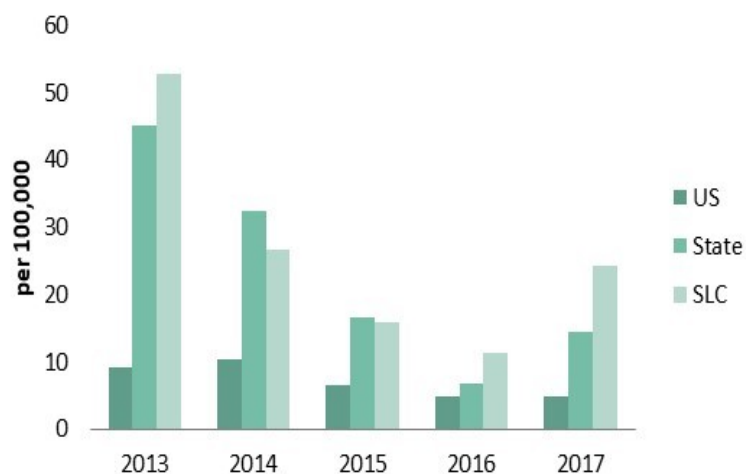
Hepatitis B

Year	U.S.	Utah	SLC
2013	1.0	0.2	0.4
2014	0.9	0.4	0.6
2015	1.1	0.3	0.6
2016	1.1	0.2	0.2
2017	N/A	0.6	1.3

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

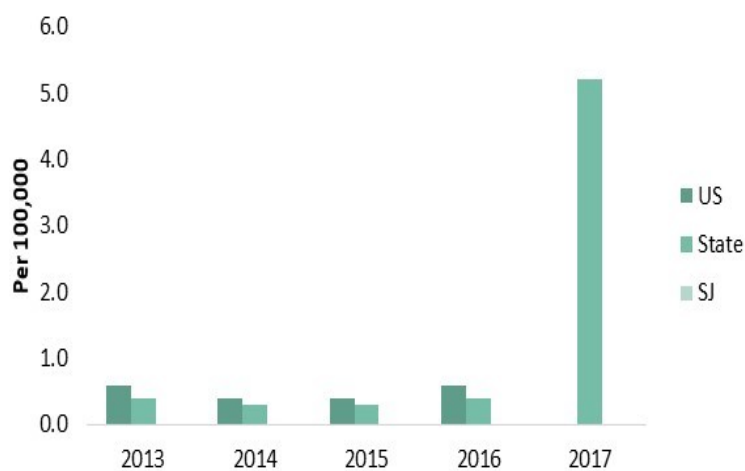


Pertussis

Year	U.S.	Utah	SLC
2013	9.1	45.1	52.9
2014	10.3	32.4	26.6
2015	6.5	16.6	16.0
2016	4.9	6.9	11.3
2017	4.9	14.4	24.3

San Juan County

Hep A Incidence 2013-2017



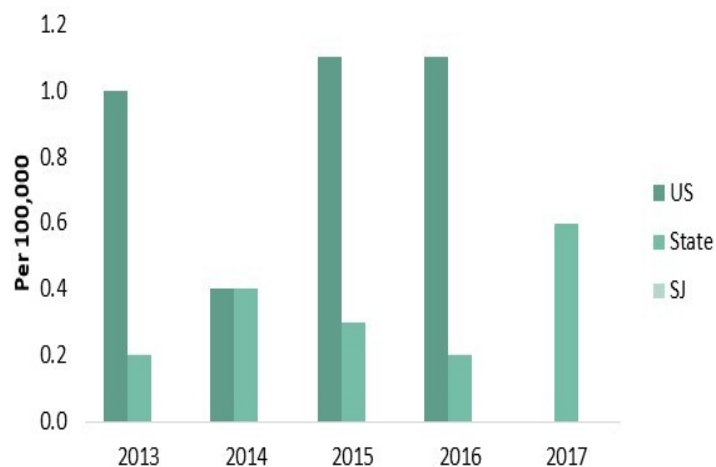
Hepatitis A

Year	U.S.	Utah	SJ
2013	0.6	0.4	*
2014	0.4	0.3	*
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	0.0

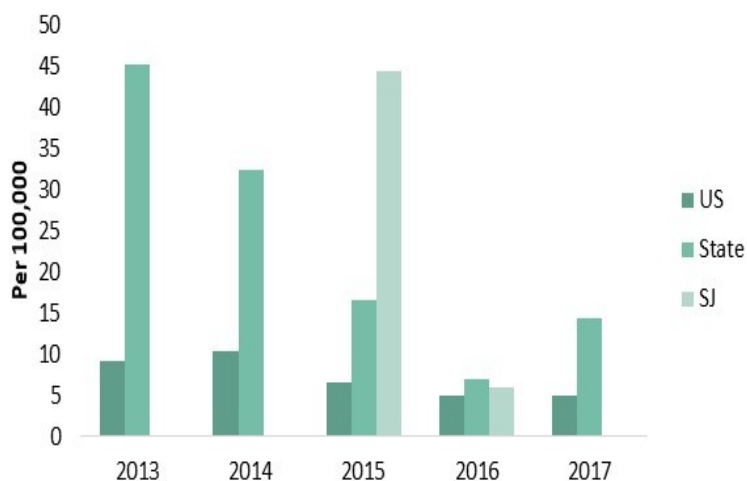
Hepatitis B

Year	U.S.	Utah	SJ
2013	1.0	0.2	*
2014	0.9	0.4	*
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017



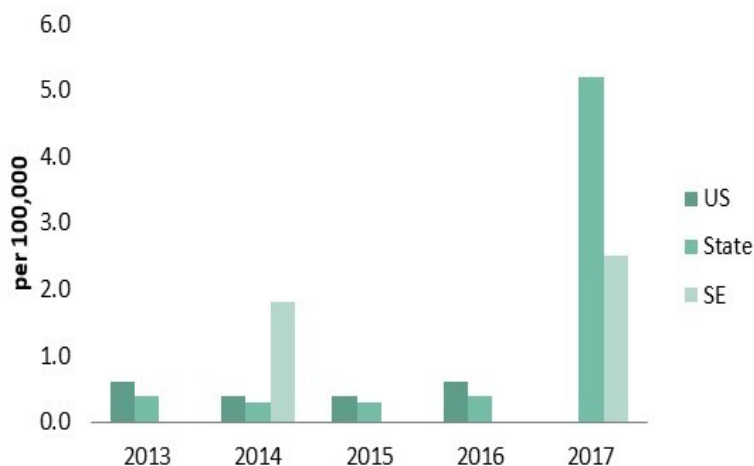
Pertussis

Year	U.S.	Utah	SJ
2013	9.1	45.1	*
2014	10.3	32.4	*
2015	6.5	16.6	44.4
2016	4.9	6.9	5.9
2017	4.9	14.4	0.0

* 2013–2014 data combined with Southeast. San Juan became their own jurisdiction in 2015.

Southeast

Hep A Incidence 2013-2017



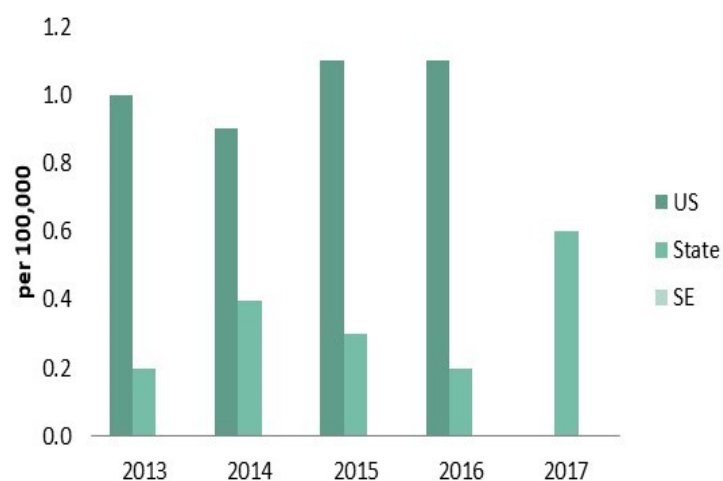
Hepatitis A

Year	U.S.	Utah	SE
2013	0.6	0.4	0.0*
2014	0.4	0.3	1.8*
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	2.5

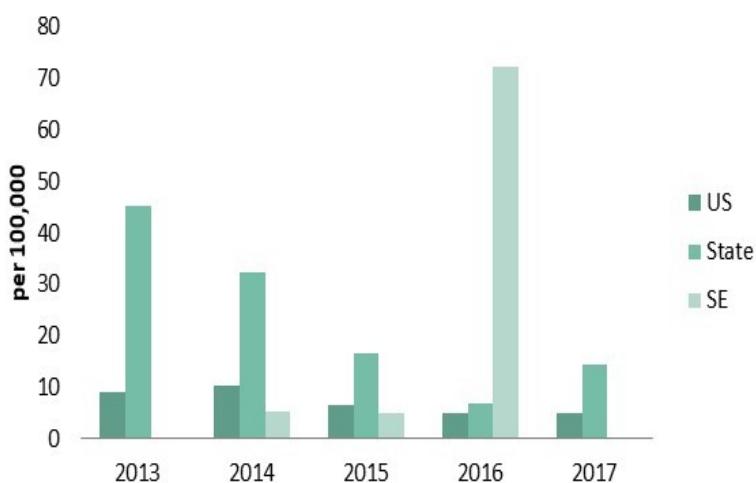
Hepatitis B

Year	U.S.	Utah	SE
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017



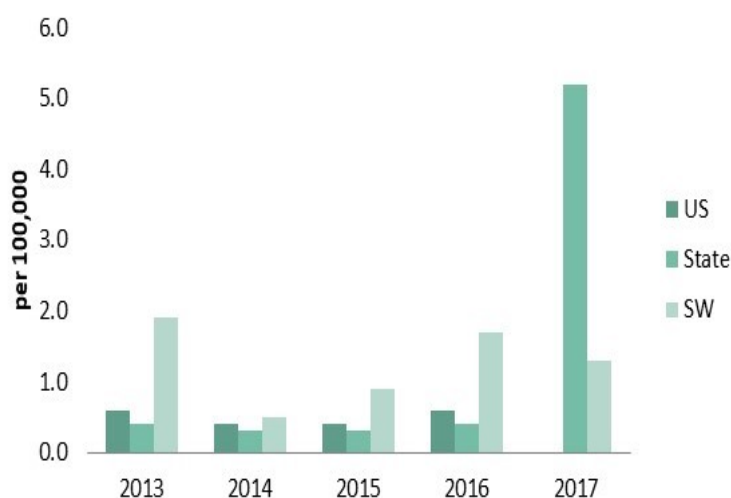
Pertussis

Year	U.S.	Utah	SE
2013	9.1	45.1	0.0
2014	10.3	32.4	5.4
2015	6.5	16.6	5.0
2016	4.9	6.9	72.2
2017	4.9	14.4	0.0

* 2013–2014 data includes data from San Juan. San Juan became their own jurisdiction in 2015.

Southwest

Hep A Incidence 2013-2017



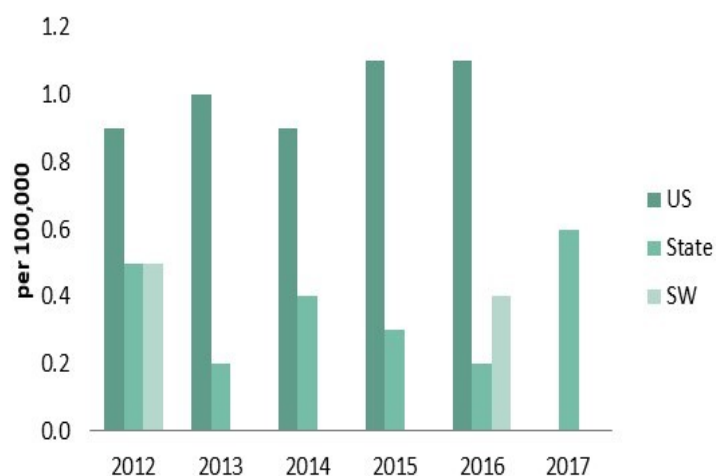
Hepatitis A

Year	U.S.	Utah	SW
2013	0.6	0.4	1.9
2014	0.4	0.3	0.5
2015	0.4	0.3	0.9
2016	0.6	0.4	1.7
2017	N/A	5.2	1.3

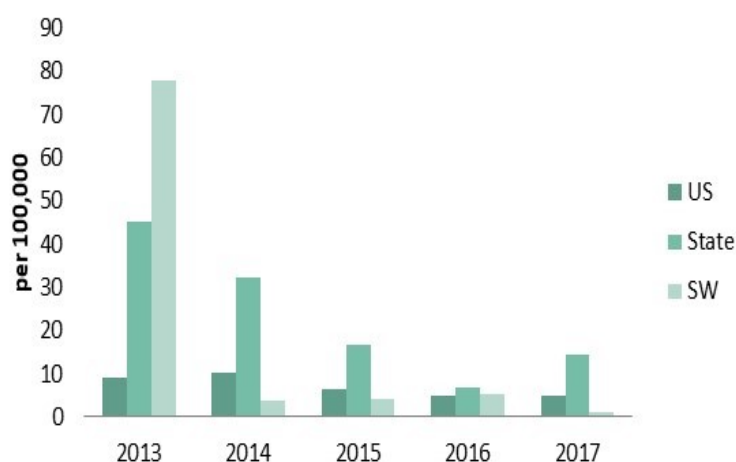
Hepatitis B

Year	U.S.	Utah	SW
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	0.0
2016	1.1	0.2	0.4
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

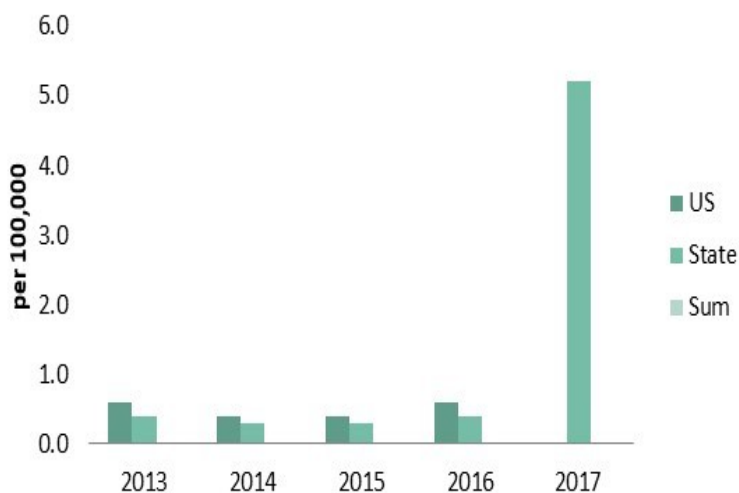


Pertussis

Year	U.S.	Utah	SW
2013	9.1	45.1	77.8
2014	10.3	32.4	3.7
2015	6.5	16.6	4.1
2016	4.9	6.9	5.2
2017	4.9	14.4	1.3

Summit County

Hep A Incidence 2013-2017



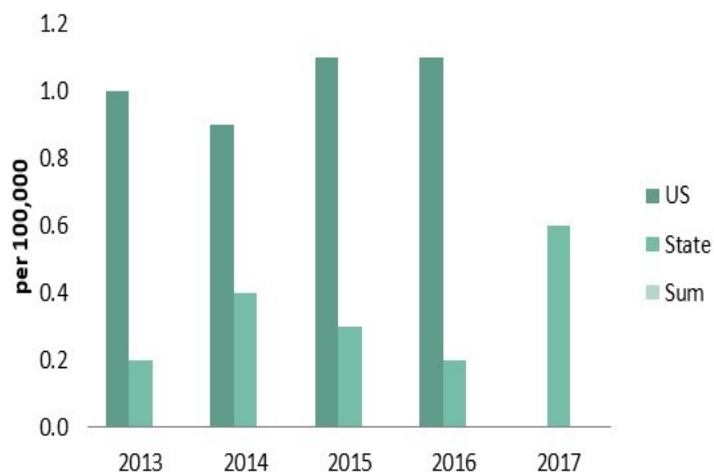
Hepatitis A

Year	U.S.	Utah	Summit
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	0.0

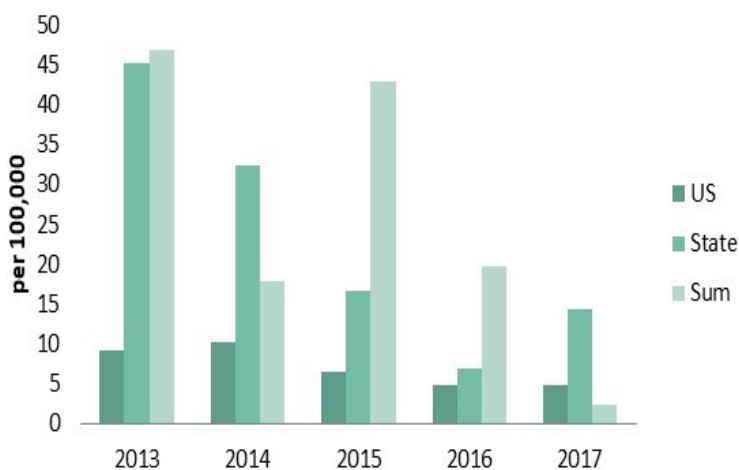
Hepatitis B

Year	U.S.	Utah	Summit
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

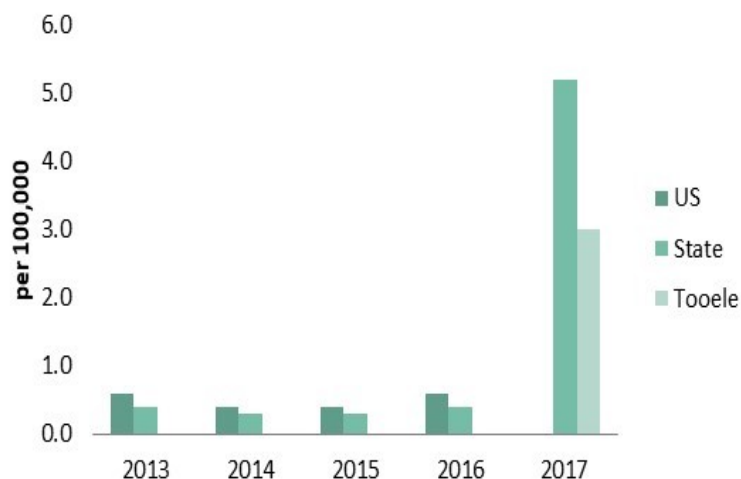


Pertussis

Year	U.S.	Utah	Summit
2013	9.1	45.1	46.8
2014	10.3	32.4	17.9
2015	6.5	16.6	42.9
2016	4.9	6.9	19.8
2017	4.9	14.4	2.4

Tooele County

Hep A Incidence 2013-2017



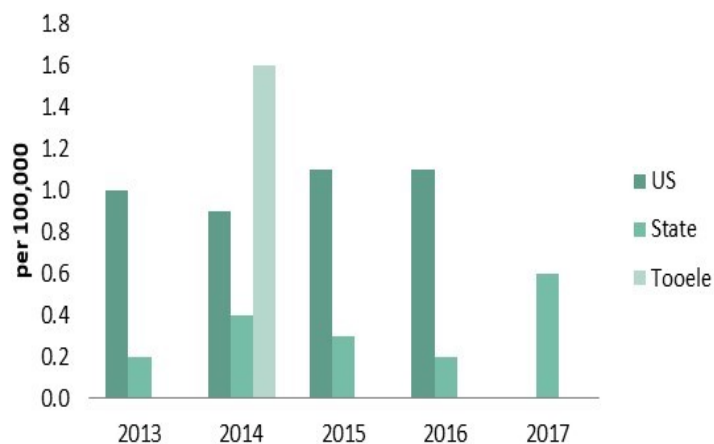
Hepatitis A

Year	U.S.	Utah	Tooele
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	3.0

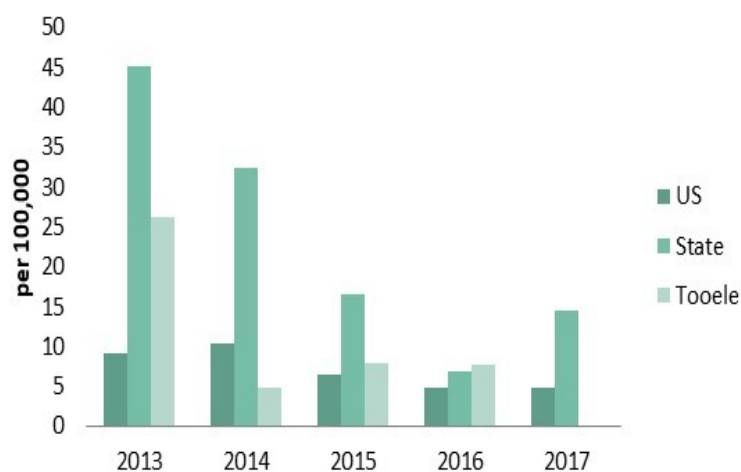
Hepatitis B

Year	U.S.	Utah	Tooele
2013	1.0	0.2	0.0
2014	0.9	0.4	1.6
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

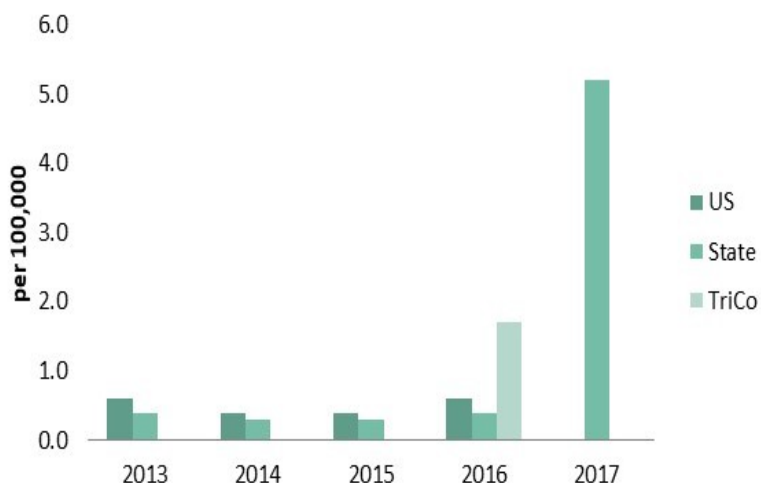


Pertussis

Year	U.S.	Utah	Tooele
2013	9.1	45.1	26.3
2014	10.3	32.4	4.9
2015	6.5	16.6	7.9
2016	4.9	6.9	7.7
2017	4.9	14.4	0.0

TriCounty

Hep A Incidence 2013-2017



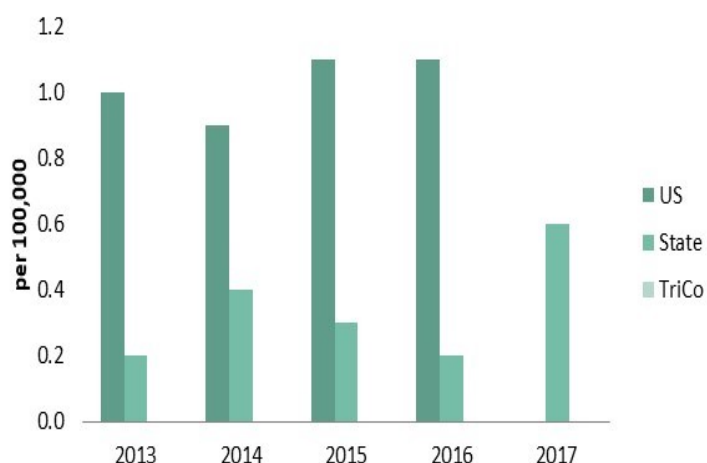
Hepatitis A

Year	U.S.	Utah	TriCo
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	1.7
2017	N/A	5.2	0.0

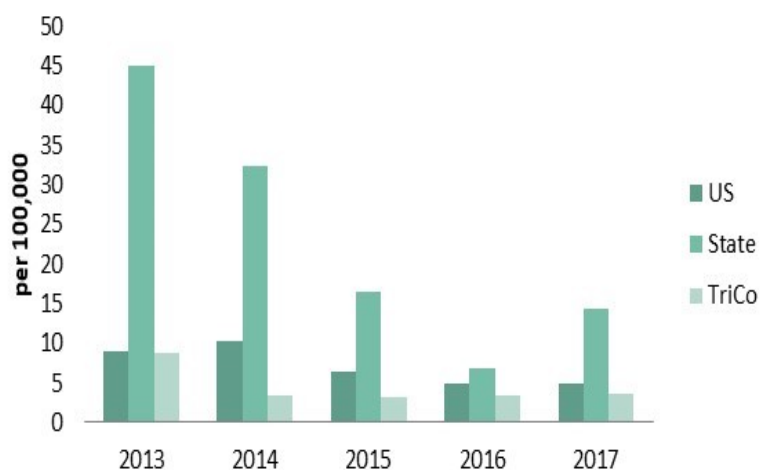
Hepatitis B

Year	U.S.	Utah	TriCo
2013	1.0	0.2	0.0
2014	0.9	0.4	0.0
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

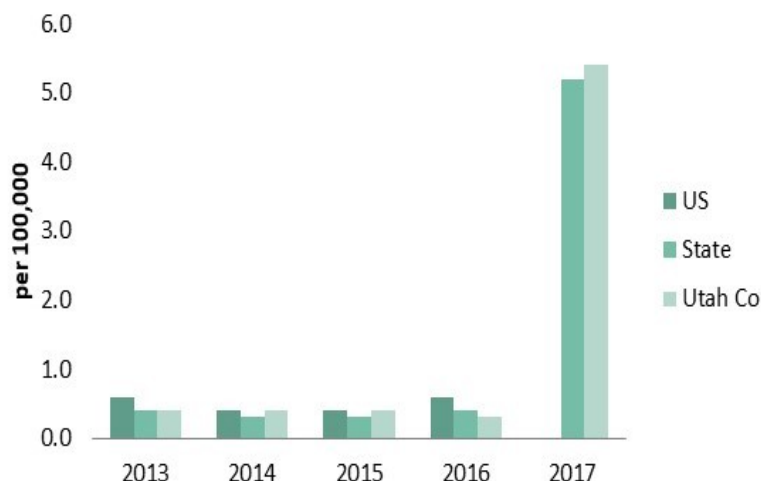


Pertussis

Year	U.S.	Utah	TriCo
2013	9.1	45.1	8.8
2014	10.3	32.4	3.4
2015	6.5	16.6	3.3
2016	4.9	6.9	3.5
2017	4.9	14.4	3.6

Utah County

Hep A Incidence 2013-2017



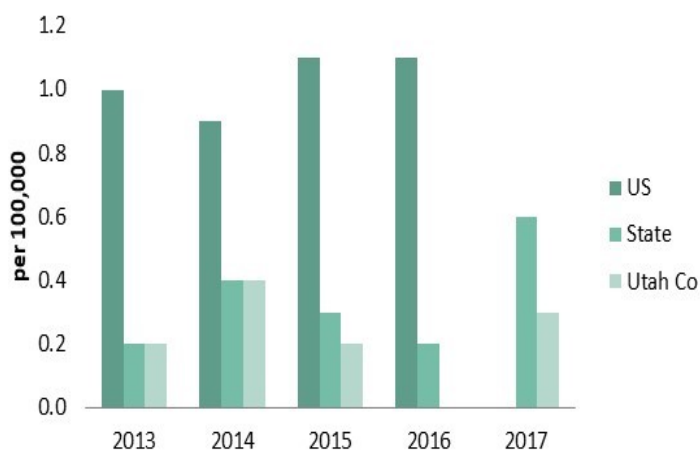
Hepatitis A

Year	U.S.	Utah	Utah Co
2013	0.6	0.4	0.4
2014	0.4	0.3	0.4
2015	0.4	0.3	0.4
2016	0.6	0.4	0.3
2017	N/A	5.2	5.4

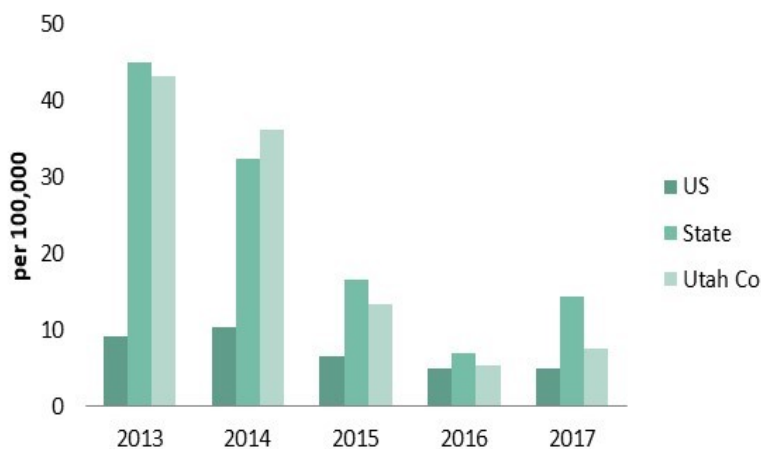
Hepatitis B

Year	U.S.	Utah	Utah Co
2013	1.0	0.2	0.2
2014	0.9	0.4	0.4
2015	1.1	0.3	0.2
2016	1.1	0.2	0.0
2017	N/A	0.6	0.3

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

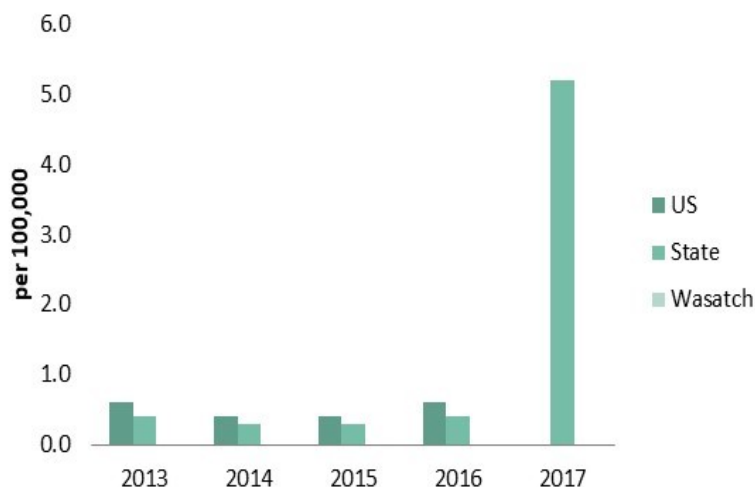


Pertussis

Year	U.S.	Utah	Utah Co
2013	9.1	45.1	43.3
2014	10.3	32.4	36.2
2015	6.5	16.6	13.4
2016	4.9	6.9	5.4
2017	4.9	14.4	7.6

Wasatch County

Hep A Incidence 2013-2017



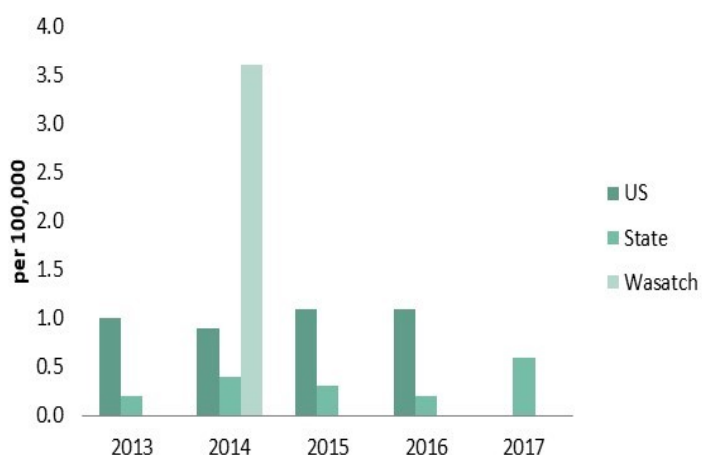
Hepatitis A

Year	U.S.	Utah	Wasatch
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	0.0

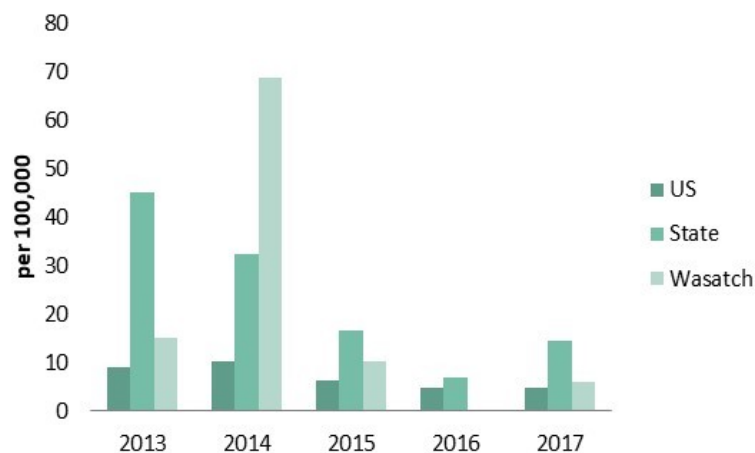
Hepatitis B

Year	U.S.	Utah	Wasatch
2013	1.0	0.2	0.0
2014	0.9	0.4	3.6
2015	1.1	0.3	0.0
2016	1.1	0.2	0.0
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017

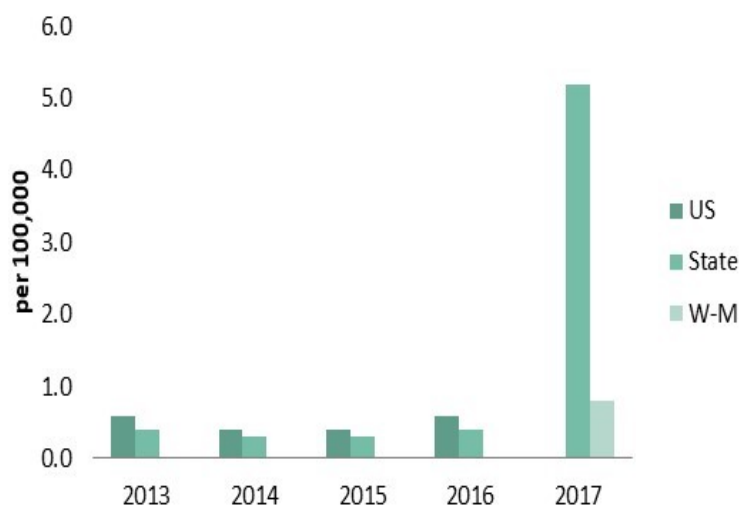


Pertussis

Year	U.S.	Utah	Wasatch
2013	9.1	45.1	15.1
2014	10.3	32.4	68.6
2015	6.5	16.6	10.3
2016	4.9	6.9	0.0
2017	4.9	14.4	6.2

Weber-Morgan

Hep A Incidence 2013-2017



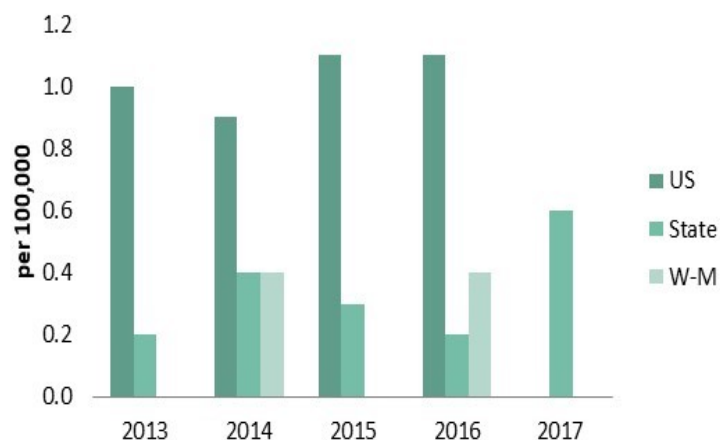
Hepatitis A

Year	U.S.	Utah	W-M
2013	0.6	0.4	0.0
2014	0.4	0.3	0.0
2015	0.4	0.3	0.0
2016	0.6	0.4	0.0
2017	N/A	5.2	0.8

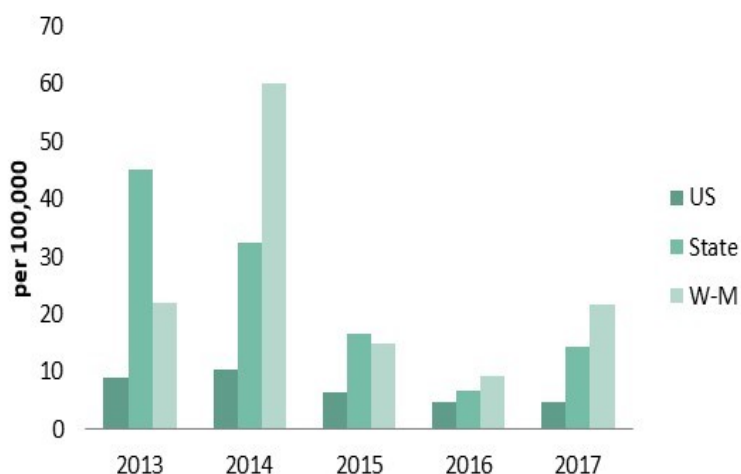
Hepatitis B

Year	U.S.	Utah	W-M
2013	1.0	0.2	0.0
2014	0.9	0.4	0.4
2015	1.1	0.3	0.0
2016	1.1	0.2	0.4
2017	N/A	0.6	0.0

Hep B Incidence 2013-2017



Pertussis Incidence 2013-2017



Pertussis

Year	U.S.	Utah	W-M
2013	9.1	45.1	22.1
2014	10.3	32.4	60.1
2015	6.5	16.6	14.9
2016	4.9	6.9	9.3
2017	4.9	14.4	21.6

The Vaccines for Children (VFC) Program helps provide vaccines to children whose parents or guardians may not be able to afford them. This helps ensure all children have a better chance of getting their recommended vaccinations on schedule. A child is eligible for the VFC Program if they are younger than 19 years of age **and falls in one of the following categories:**

- Medicaid-eligible
- Uninsured
- Underinsured
- American Indian or Alaska native

The CDC estimates that vaccination of children born between 1994 and 2013 will:

- Prevent 322 million illnesses
- Help avoid 732,000 deaths
- Save nearly \$1.4 trillion in total societal costs

In the 2018 fiscal year, it was estimated that 334,992 children younger than 19 years old were eligible for VFC funded vaccines in Utah.

VFC vaccines can be administered by any enrolled VFC Program Provider. Altogether there are 44,000 providers enrolled in the VFC Program nationwide.

Number of Active VFC Providers Utah, 2018	Total: 341
Private Providers	228
FQHC/RHC/CHC	52
Hospitals	8
Indian Health Service	3
Local Health Departments	37
Pharmacies	2
Other Providers	9
School Based Clinics	2

Clinics enrolled in VFC are required to have a compliance visit bi-annually in which their knowledge of VFC policy and procedures are assessed. At this time, a VFC representative will also observe storage and handling techniques. Below are assessment scores for compliance visits and for unannounced storage and handling visits.

Utah General Information	2016	2017
Total # of provider facilities	344	343
# of provider facilities who enrolled in VFC	13	11
# of provider facilities who unenrolled from VFC	25	24
Compliance Visit Overview		
Annual target (50% of providers)	172	172
# of visits conducted	188	
Average overall score	94.3%	94.0%
Average storage and handling score	93.0%	92.0%
Average non storage and handling score	95.0%	96%
Unannounced Storage and Handling (USH) Overview		
Annual target (5% of provider facilities)	17	17
# of visits conducted	105	83
Average USH score	93.0%	93.0%

Compliance Scores by LHD	2016	2017
Bear River	91.3%	95.0%
Central	91.8%	92.8%
Davis	92.9%	93.0%
Salt Lake	92.1%	93.9%
San Juan	93.5%	90.0%
Southeast	95.7%	95.7%
Southwest	98.1%	95.7%
Summit	95.7%	95.7%
Tooele	91.3%	89.2%
TriCounty	96.5%	93.0%
Utah	99.1%	96.0%
Wasatch	95.7%	95.7%
Weber-Morgan	91.0%	93.5%

Below is the number of doses distributed to VFC clinics throughout Utah in 2016 and 2017.

VFC Doses Distributed 2016-2017		
	2016 Total	2017
DTaP	19,610	14,600
Pediarix	27,790	25,370
Pentacel	21,265	28,510
Kinrix	10,470	12,850
IPV	11,060	7,850
Hep A	39,930	37,490
Hep B	22,200	20,760
HIB	39,470	33,405
MCV	21,161	21,080
HPV	29,040	23,040
Men B	2,649	2,243
MMR	16,290	16,320
MMRV	18,190	18,060
PCV	65,020	62,450
Rotavirus	42,880	41,020
Td	880	1,030
Tdap	16,490	17,495
Varicella	21,440	19,200
Total	425,835	402,773

1. Centers for Disease Control and Prevention (CDC). October 2018. *National Immunization Survey (NIS) 2010-2017*. Retrieved from: <https://www.cdc.gov/vaccines/vaxview/>
2. Utah Immunization Program. July 2018 *Child Care Annual Summary Report*. Utah Department of Health.
3. Behavioral Risk Factor Surveillance System (BRFSS). September 2018. Utah Department of Health, Center for Health Data and Informatics.
4. Utah Immunization Program. August 2018. *Long-Term Care Report*. Utah Department of Health.
5. Utah Statewide Immunization Information System (USIIS). October 2018. Utah Department of Health.

Immunization Program, Bureau of Epidemiology

Division of Disease Control and Prevention

Utah Department of Health

PO Box 142012

Salt Lake City, Utah 84114-2012

Phone: 801-538-9450

Fax: 801-538-9440

Website: www.immunize-utah.org

Utah Statewide Immunization Information System, Bureau of Epidemiology

Division of Disease Control and Prevention

Utah Department of Health

Helpline: 801-538-3440 / 800-678-3440

Website: www.usiis.org

Data Resources Program, Maternal and Child Health Bureau

Division of Community and Family Health Services

Utah Department of Health

PO Box 142002

Salt Lake City, Utah 84114-2002

Phone: 801-538-6916

Fax: 801-538-6591

Website: www.health.utah.gov/drp

Other Available Resources

National Immunization Program

National Immunization Data and Statistics

Immunization Action Coalition

Healthy People 2020

Utah Department of Health

Utah Maternal and Child Health Bureau

Indicator-Based Information System for Public Health

Office of Health Care Statistics

Utah Medicaid Program

www.cdc.gov/vaccines

<https://www.cdc.gov/vaccines/vaxview/>

www.immunize.org

www.healthypeople.gov

www.health.utah.gov

www.health.utah.gov/mch

ibis.health.utah.gov

stats.health.utah.gov

Medicaid.utah.gov

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