Immunization Coverage Report

State of Utah: 2011



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Prepared by

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The *Immunization Coverage Report, State of Utah 2011*, 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 across the lifespan. Particularly, the immunization coverage status for Utah children and adults is highlighted. Although the report is not comprehensive, it is an attempt to gather immunization data from multiple, pertinent sources and present them in a simple, concise format. Information is added and updated each year according to recommendations by various stakeholders at state and local levels. Such updates enable easy access to the most current immunization data and assist local immunization programs in evaluating coverage areas and identifying gaps in services.

An ongoing major focus of immunization coverage remains the infant and early childhood population. According to the 2010 National Immunization Survey (NIS), Utah ranked 35th in the nation for the number of two-year-olds who were fully immunized. The NIS measures the number of children 19-35 months of age who have completed the 4:3:1:4:3:1:4 (4 DTaP, 3 Polio, 1 MMR, 4 Hib, 3 Hepatitis B, 1 Varicella, and 4 Pneumococcal) series by 24 months of age. These rates indicate that much work remains to achieve the *Healthy People 2020* objective of reducing, eliminate, or maintain elimination of cases of vaccine-preventable diseases. The focus of work continues to identify areas of weakness where efforts can be concentrated to effect significant improvements.

Ongoing efforts to increase childhood immunization levels include a variety of interventions, such as: ensuring that health care providers have current information on immunization best practices; implementation of a coordination project with the Intermountain Pediatric Society; and enrolling diverse providers in the Utah Statewide Immunization Information System (USIIS). These combined efforts can help ensure Utah's children are protected from vaccine-preventable infections now and in the future.

We value your opinion and welcome your feedback about this report.

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Phone: (801) 538-9450 Fax: (801) 538-9440 The 12 local health districts (LHDs) have been utilized in this report as the geographic boundaries of reporting service areas. Statewide information is also presented. For each service area, the information is divided into three broad categories: *Demographic and Socioeconomic Factors; Early Childhood Immunization;* and *Child and Adult Immunization.* There are detailed descriptions of data contained within each of these categories on the following introduction pages.

Although limited comments may follow a graph or chart, the detailed endnotes may be found in the *Reference Notes* listed on page 89. Explanatory footnotes are available on most pages and are intended to provide information pertaining to data sources, programs and limitations on data interpretation (e.g., across provider groups for CoCASA; Head Start reporting groups). Where applicable, county-specific information is presented.

Demographic information is vital to understanding the current health and socioeconomic situations of Utah residents. One factor, such as whether a family lives in a rural or urban area of the state, can have a significant impact on access to health care. The age distribution of a population will affect which immunizations, and how many doses are required, to adequately vaccinate that population.

Demographic information is provided for each of Utah's health districts pertaining to the following categories:

Population, Poverty Rate, Race/Ethnicity, and Health Insurance Status

The changing nature of Utah's population requires state immunization staff, public health officials, providers, and other public health workers to be increasingly familiar with the state's shifting demographic situation.

The health of a family is often affected by socioeconomic factors. Poverty can be an indirect contributor to disease and illness, including delayed immunizations. A clear understanding of socioeconomic factors is necessary to identify, analyze, and move forward with appropriate targeted goals for immunizations across the lifespan.

Insurance status has a profound effect on access to adequate health care across the lifespan. The 2008-2009 Utah Healthcare Access Survey³ showed that 10.7% of Utah residents (0-64) had no health insurance. Eligibility guidelines for families to qualify for Medicaid, Children's Health Insurance Program (CHIP), and Women, Infants and Children (WIC) assistance are based on federal poverty levels and age. Medicare eligibility is based on age.

The most current data available are included in this report. The year during which the data were taken for each demographic or socioeconomic factor does not always match across categories. Population data are from calendar year 2009-2010. Medicaid data are from fiscal year 2010. Poverty Rate and Health Insurance Status data come from a pooling of 2009-2010 calendar years. The estimates are calculated by multiplying the 2010 population by the proportion in each category (*Poverty, Health Insurance Status*) for 2009-2010. Because these are estimates, the figures are rounded to the nearest 100 persons (not all data was rounded to the nearest 100 persons). Race and ethnicity data are for the 2009 calendar year. Some data may have used 2008-2009 together because of availability of data that was available as report was being completed.

The Advisory Committee on Immunization Practices (ACIP) at the Centers for Disease Control and Prevention (CDC) has established a standard of comparison for immunization status. Up-to-Date at age two (UTD) is the percentage of children two years old (24 months) who have received all doses of the recommended vaccines at 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.

Coverage based on the National Immunization Survey (NIS) for children was reported differently in 2010 compared to previous years in large part due to the Haemophilus influenza type b (Hib) shortage. Because of the new presentation of data it is difficult to compare coverage levels of combination of vaccines (e.g., 4:3:1:3:3:1 series) to previous years. The new measures consider the type of Hib vaccine administered, the addition of 4 Pneumococcal doses, and in one case the removal of Hib from consideration entirely. Utah state-level data is compared to the national average, and rankings for individual vaccines are also reported to give the reader an idea of how well we stack up to other states for the traditional vaccines included in the NIS. So please be aware of some comparative data that might be difficult to interpret because of previous years.

Comprehensive Clinic Assessment Software Application (CoCASA): Private Providers and LHDs

The vaccine series used as a standard established by ACIP consists of 4 doses of Diphtheria, Tetanus, Pertussis (DTaP); 3 doses of Polio (IPV); 1 dose of Measles, Mumps, Rubella (MMR); 3 doses of Hib; 3 doses of Hepatitis B and 1 dose of Varicella vaccine. This series is typically written as **4:3:1:3:3:1**.

CoCASA, a computer software program, is used to assess immunization rates in provider offices. Only Vaccine for Children (VFC) providers are assessed. While CoCASA assessment procedures are standardized, all private providers may not be evaluated on an annual basis. Some private clinics are randomly selected for assessment while the remaining private clinics are selected because they were below a certain threshold compliance level. All LHDs are assessed annually.

LHDs may contain multiple counties within their service area. Some counties had very few patients and provided inadequate information for analysis. Consequently, coverage will be reported only by health district in this report.

Health Care Facilities and Personnel

The geographic distribution of health care providers (i.e., hospitals, community health center clinics, private providers) correlates strongly with families' ability to access and receive immunizations and primary health care in a medical home. Counts of VFC providers, public medical clinics, hospital long-term care facilities, and local health district offices are reported by LHD.

Specific coverage information relating to the CoCASA assessment is located on the *Early Childhood Immunization* pages. The first two charts (three charts if the service area had an assessment at a Federally Qualified Health Center (FQHC)) on these pages illustrate the type of up-to-date (UTD) statuses which include: *UTD at age two*; *Late UTD*; *UTD one more visit*; and *Too late for UTD*. Information on missed opportunities to vaccinate is also presented graphically. The second set of charts illustrates the number and type of USIIS providers and UTD status according to USIIS records.

Type of Immunization UTD Status

The Utah *UTD* at age two rate is below our goal, but progress in a few basic areas may increase childhood immunization coverage. There is a large segment of the population that is *Late UTD* and an even larger population that can be brought *UTD with one more visit*. It is hoped that future targeted efforts toward children who can be brought *UTD with one more visit* can protect many more children, decreasing the number who are *Late UTD*, and improve our statewide immunization rates at age two. *Late UTD* indicates that the child was immunized at the time of the assessment, but was not *UTD at age two*. Too *Late for UTD* does not indicate that the child can't receive immunizations, but that the child was not immunized by the assessment date and cannot be brought *UTD at age two*. These data come exclusively from CoCASA assessments and do not necessarily represent the entire population.

Utah Statewide Immunization Information System (USIIS)

USIIS records are vital in assisting parents and medical providers in monitoring and ensuring their children and patients are UTD on all immunizations. These electronic records help track patients as they move geographically, change insurance, or change their medical home. Reporting UTD status according to USIIS records consolidates the reports from local health departments, community health clinics, and various private providers.

For this report, USIIS UTD status was organized by geographical area according to ZIP code and is reported by service area. UTD percentages are for 2007-2009 and correspond with the same time frame as the National Immunization Survey (NIS). The data set includes all children in the database with at least two electronic immunization records. As of May 31, 2010, 66.1% of all Utah children under the age of six have at least two records in USIIS. Data limitations include the following factors: not all providers participate in USIIS, it is possible that even among USIIS providers not all vaccinations are entered; patient records may be incomplete; and patients may receive vaccinations in several different counties over the course of their record.

The "2010 Economic Report to the Governor" indicates that, nationally, Utah has the youngest population (median age 28.7) among the 50 states.* According to the Indicator-Based Information System for Public Health (IBIS-PH) in 2009, 9.6% of the total Utah population was 0-4 years of age and 21.2% of the total population was 5-17 years of age.

Exposure to groups of people of any age increases the risk of infectious disease. 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 of the home. The Utah Immunization Rule for Students (R396-100) went into effect in 1975 to implement consistent requirements to protect children attending school.

School Entry (Kindergarten & 7th Grade) & Second Dose MMR (K – 12)

Required Kindergarten Entry Immunizations are: DTaP, Polio, MMR, Hepatitis B, Hepatitis A, and Varicella. Beginning May 2007, children entering 7th grade must have: Hepatitis B, Varicella and Tdap. Children grades K-12 are required to have two doses of MMR vaccine.

Utah statute requires that all schools report student immunization information to the Utah Immunization Program (UIP) by November 30. This report is sent electronically and, beginning in 2008, has been validated through audits conducted by the UIP (see *Appendix F*). By collaborative agreement with UDOH, school district immunization reports are provided to the Utah State Office of Education (USOE).

WIC, Child Care, and Head Start Enrollments/Coverage

Children attending child care facilities, preschools, and school settings have increased chances for exposure to illness. Required early childhood immunizations as of July 1, 2008 were: DTaP, Polio, MMR, Hib, Hepatitis B, Hepatitis A, Pneumococcal (PCV7), and Varicella.

Child care facilities, preschools, and Head Start programs report immunization information in the same manner as school districts to the Utah State Office of Education (USOE). The number of clinics/facilities reported here include only those that submitted the electronic immunization reports.

The 12 Utah Head Start (HS) programs serve children through federal grants for Head Start, Early Head Start, Migrant Head Start, and American Indian Head Start. HS program areas do not correspond to LHD geographic service areas. Wasatch County HS data are reported in the Utah County Health District service area and Morgan County HS data are reported in the Davis County Health District service area.

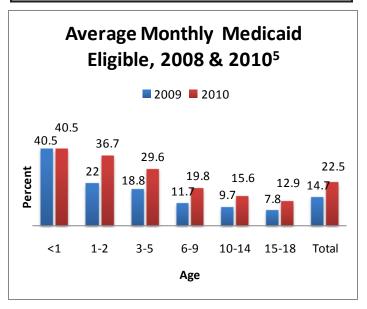
WIC clinics provide unique opportunities among high risk populations to educate families about recommended vaccines. Therefore, facility and enrollment figures are reported.

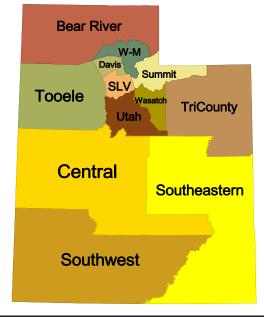
Influenza and Pneumococcal

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

The 2009 Behavioral Risk Factor Surveillance System (BRFSS) survey results on influenza and pneumococcal immunization data have been included. *Appendix C* includes 2009 long-term care and assisted living facility immunization information.

Population 2010 ¹	Number	% of Total
Total Population	2,847,897	
17 and Under	875,077	30.7%
18 to 34	805,448	28.3%
35 to 49	511,466	18.0%
50 to 64	398,030	14.0%
65 and Over	257,876	9.1%
Poverty	Estimated Number 2010 ¹	% of Total 2008 ²
Total 0-100% Poverty	262,006	9.2%
17 and Under	103,259	11.8%
18 to 34	76,518	9.5%
35 to 49	34,268	6.7%
50 to 64	32,240	8.1%
65 and Over	14,441	5.6%
Total 101-200% Poverty	609,450	21.4%
17 and Under	231,895	26.5%
18 to 34	182,837	22.7%
35 to 49	104,851	20.5%
50 to 64	40,599	10.2%
65 and Over	44,097	17.1%





Population 2010 ¹	Number	% of Total
Total 0-18	921,248	
<1	55,242	6.0%
1-2	111,193	12.1%
3-5	158,983	17.3%
6-9	202,387	22.0%
10-14	221,409	24.0%
15-18	172,034	18.7%

Uninsured	Estimated Number 2010 ¹	% of Total 2008 ³
Total Uninsured (0-64)	306,882	10.7%
17 and Under	76,131	8.7%
18 to 34	140,148	17.4%
35 to 49	60,353	11.8%
50 to 64	30,250	7.6%
Selected Insurance Type 2009 ⁴	Number	% of Total Insured
Medicare	296,073	11.7%
CHIP*	40,527	4.4%

*Children's Health Insurance Program, Ages 0 to 18



State CoCasa: Up-to-Date at Age Two by Antigen 2010⁶

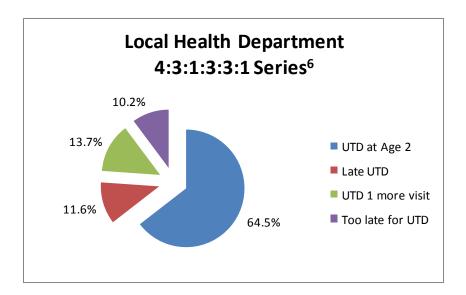
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	66.5%	84.3%	82.3%	75.4%	82.8%	80.7%	52.4%	51.5%, 53.2%

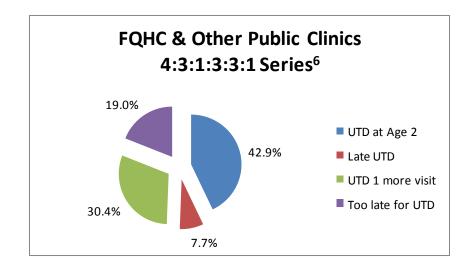
Up-to-Date at Age Two (4:3:1:3:3:1) ⁶				
	2	2010	2009	
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval	
Private VFC Providers	51.5%	50.6%, 52.4%	49.8%, 52.0%	
FQHC/RHC	42.9%	39.6%, 46.2%	45.0%, 53.6%	
Local Health Departments	64.5%	62.0%, 67.0%	57.1%, 59.5%	

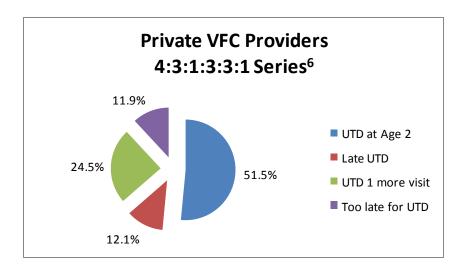
	NIS ⁹ Coverage Status 2011
P e r c e n t	90 76.2 76.2 76.2 69.5 72.7 70 60 53.2 49.9 56.6 40 10 Utah 10 U.S. Vaccine Series

Utah NIS Rank ⁹				
Vaccine	Utah 2011	U.S. 2011		
4 DTaP	44	27		
3 Polio	45	29		
1 MMR	49	28		
3 Hib	45	24		
3 Нер В	32	27		
1 Varicella	38	27		
4 Pneumo	39	26		
4:3:1	45	27		
4:3:1:4:3:1	42	22		
4:3:1:4:3:1:4	41	21		
4:3:1:0:3:1:4	35	25		

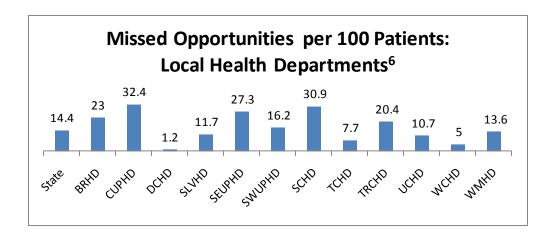


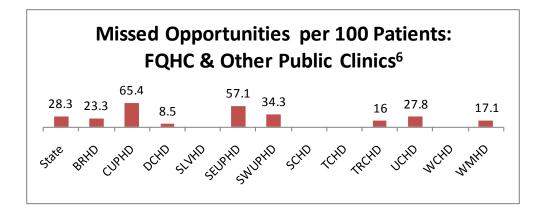


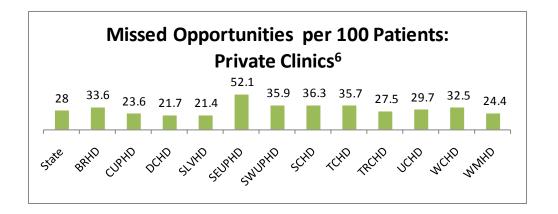






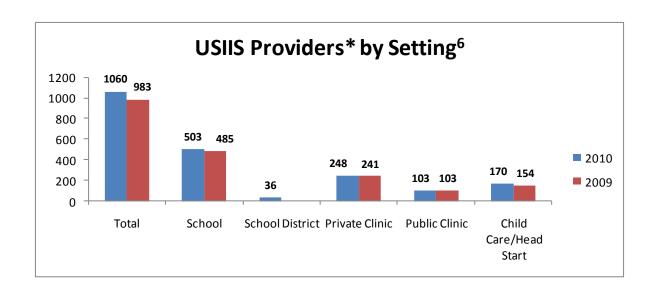






*Providers as of 2/28/11

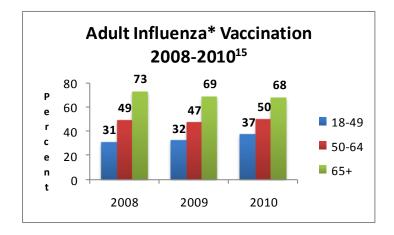


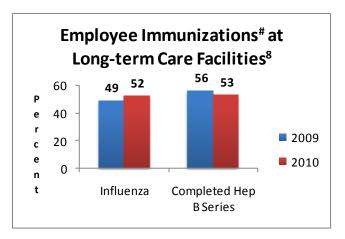


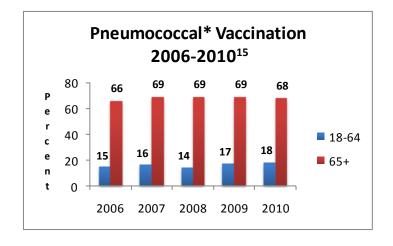


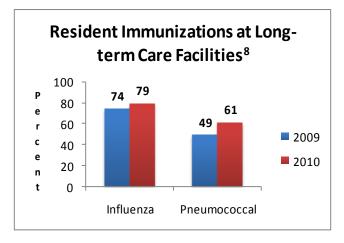
Child and School Health 2010			
Child and School Health	Clinics/ Facilities	Enrollment	
WIC Women ¹¹	46	15,200	
WIC Infants ¹¹	46	14,436	
WIC Children ¹¹	46	30,529	
Child Care ¹²	276	15,636	
Head Start ¹³	84	5,796	
Public/Charter Schools ¹⁴	1,084	609,714	
Private Schools ¹⁴	124	14,996	

Immunized for School 2010 ⁶			
	Adequately Immunized		
Child Care Facilities and Preschools	89.1%	1.8%	
Head Start Centers	81.8%	1.4%	
Kindergarten School Entry	90.2%	3.7%	
Second-Dose Measles (K-12)	96.4%	3.1%	
7th Grade Entry	92.7%	3.7%	



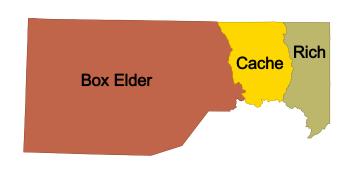






Population 2010 ¹	Number	% of Total
Total Population	168,823	
17 and Under	53,817	31.9%
18 to 34	54,042	32.0%
35 to 49	25,402	15.0%
50 to 64	20,832	12.3%
65 and Over	14,730	8.7%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	5,610	5.1%
17 and Under	**	**
18 to 34	**	**
35 to 49	2,185	8.6%
50 to 64	792	3.8%
65 and Over	**	**
Total 101-200% Poverty	46,325	27.44%
17 and Under	19,536	36.3%
18 to 34	15,024	27.8%
35 to 49	7,214	28.4%
50 to 64	**	**
65 and Over	3,830	26.0%

Race/ Ethnicity ¹	2000	2004	2009
White	97.00%	96.84%	95.47%
Black	0.35%	0.47%	0.90%
American Indian/Alaska Native	0.71%	0.75%	1.16%
Asian	1.79%	1.77%	2.20%
Native Hawaiian & Other Pacific Islander	0.17%	0.18%	0.28%
Hispanic	6.35%	7.40%	8.94%



Population 2009 ¹	Number	% of Total
Total 0-18	56,801	
<1	3,527	6.2%
1-2	6,867	12.1%
3-5	10,272	18.1%
6-9	12,616	22.2%
10-14	13,282	23.4%
15-18	10,237	18.0%
Population 2010 ¹	Number	% of Total
Box Elder	50,263	29.8%
Cache	116,229	68.8%
Rich	2,331	1.4%

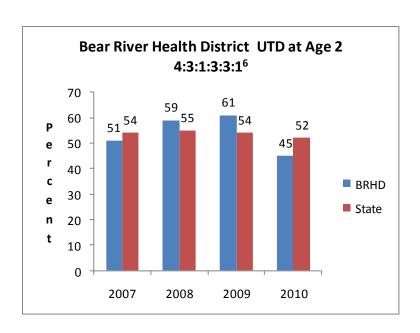
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	22,100	14.3%
17 and Under	3,400	6.3%
18 to 34	15,000	27.8%
35 to 49	1,800	7.2%
50 to 64	1,900	9.2%*



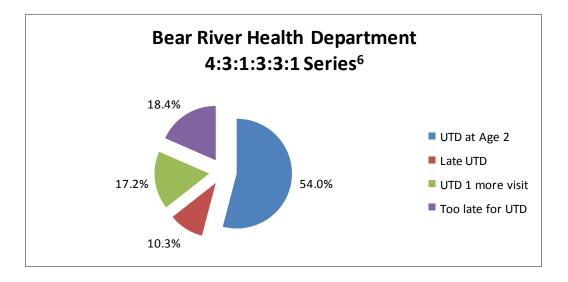
C	CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶							
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	62.8%	81.2%	81.6%	66.8%	79.9%	80.5%	45.4%	42.6%, 48.2%

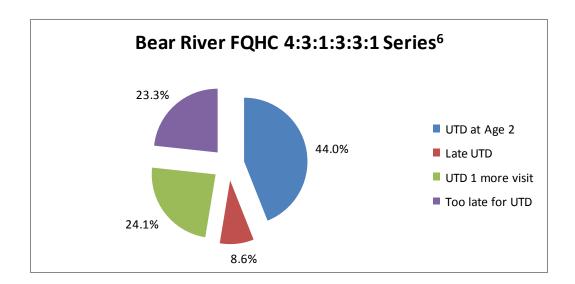
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶				
	20	010	2009	
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval	
All VFC Private Providers	44.8%	41.7%, 47.9%	55.2%, 64.0%	
FQHC/RHC	44.0%	35.0%, 53.0%	NA	
Local Health Departments	54.0%	43.5%, 64.5%	62.3%, 85.1%	

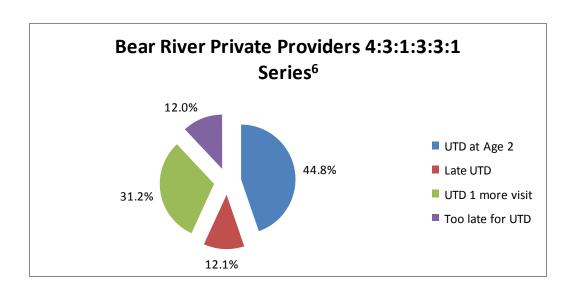
Health Care 2009			
Providers/Facilities	Number		
Private VFC Providers ⁶	15		
Public Medical Clinics ⁶	8		
Hospitals ⁷	5		
Long-term Care and Assisted Living Centers ⁸	17		
Local Health District Offices ⁶	2		



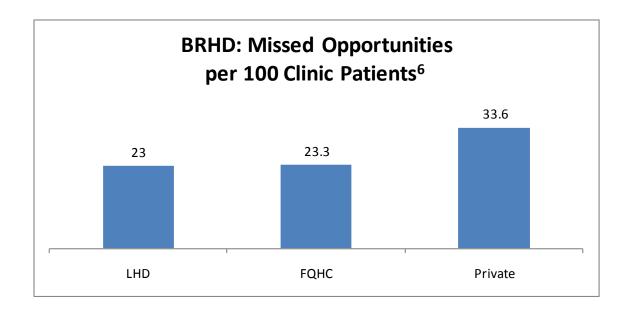


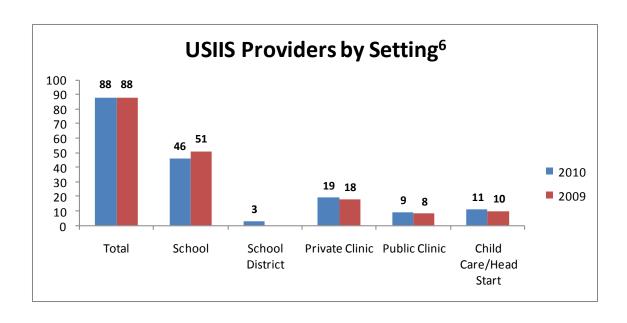










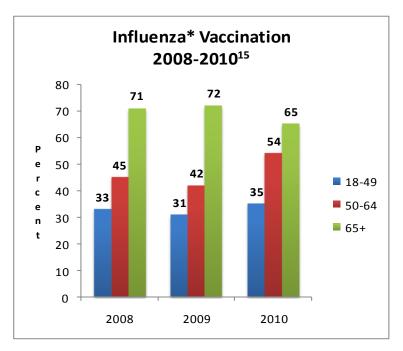


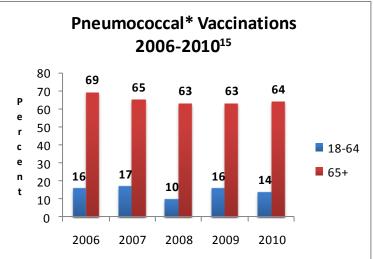


Adequately Immunized by School District 20106								
	Box E	lder	Cac	he	Logan	City	Ric	h
Bear River	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp
Kindergarten School Entry	93.2%	3.2%	93.2%	2.7%	94.2%	1.8%	93%	3.0%
Second-Dose Measles (K-12)	97.1%	2.3%	97.6%	2.4%	98.1%	1.1%	99.2%	.83%
7th Grade Entry	96.6%	2.9%	95.4%	3.4%	97.2%	1.6%	100%	0%

Child and & School Health 2010				
Child and School Health	Clinics/ Facilities	Enrollment		
WIC Women ¹¹	3	1,361		
WIC Infants ¹¹	3	1,244		
WIC Children ¹¹	3	2,638		

Immunized for Child Care 2010 ⁶				
Bear River	Adequately Immunized	Total Exemptions		
Child Care Facilities and Preschools	97.4%	1.5%		
Head Start Centers	74.2%	0.3%		





Population 2010 ¹	Number	% of Total
Total Population	77,731	
17 and Under	22,394	28.8%
18 to 34	22,592	29.1%
35 to 49	11,938	15.4%
50 to 64	11,500	14.8%
65 and Over	9,307	12.0%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	7,695	9.9%
17 and Under	2,822	12.6%
18 to 34	2,960	13.1%
35 to 49	**	**
50 to 64	**	**
65 and Over	810	8.7%
Total 101-200% Poverty	23,863	30.7%
17 and Under	8,062	36.0%
18 to 34	8,111	35.9%
35 to 49	3,343	28.0%
50 to 64	1,231	10.7%
65 and Over	3,015	32.4%

Race/ Ethnicity ¹	2000	2004	2009
White	97.72%	97.52%	96.06%
Black	0.25%	0.31%	0.53%
American Indian/Alaska Native	1.39%	1.44%	2.20%
Asian	0.40%	0.45%	0.82%
Native Hawaiian & Other Pacific Islander	0.24%	0.28%	0.38%
Hispanic	4.83%	6.00%	7.35%



Population 2010 ¹	Number	% of Total
Total 0-18	24,054	
<1	1,253	5.2%
1-2	2,506	10.4%
3-5	3,682	15.3%
6-9	4,825	20.1%
10-14	6,231	25.9%
15-18	5,557	23.1%
Population 2010 ¹	Number	% of Total
Juab	10,373	13.3%
Millard	13,939	17.9%
Piute	1,479	1.9%
Sanpete	28,113	36.1%
Sevier	21,134	27.2%
Wayne	2,693	3.5%

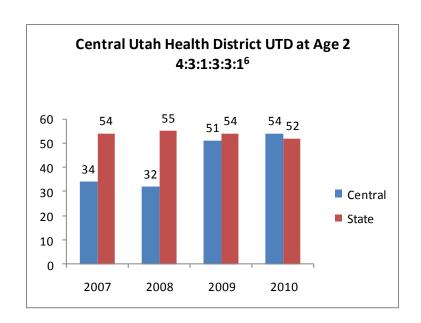
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	12,900	18.9%
17 and Under	1,900	8.5%
18 to 34	6,700	29.6%
35 to 49	2,300	19.4%
50 to 64	2,000	17.4%



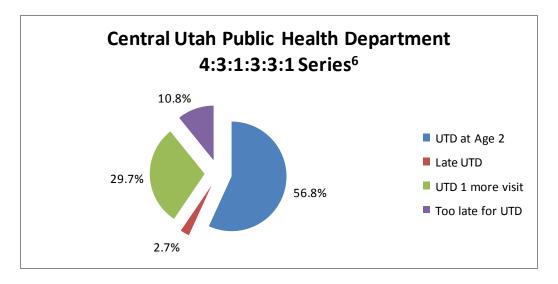
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	62.9%	87.9%	82.4%	86.4%	87.7%	74.6%	53.6%	49.0%, 58.2%

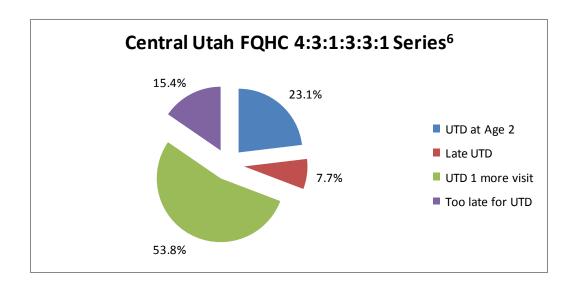
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	2009					
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	55.3%	50.3%, 60.3%	46.8%, 56.2%			
FQHC/RHC	23.1%	6.9%, 39.3%	2.9%, 31.5%			
Local Health Departments	56.8%	40.8%, 72.8%,	42.8%, 66.0%			

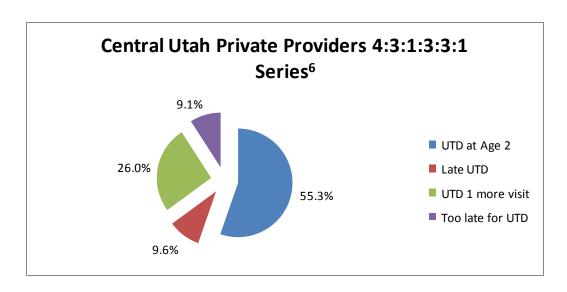
Health Care 2009						
Providers/Facilities	Number					
Private VFC Providers ⁶	15					
Public Medical Clinics ⁶	10					
Hospitals ^{7,*}	7					
Long-term Care and Assisted Living Centers ⁸	17					
Local Health District Offices ⁶	8					



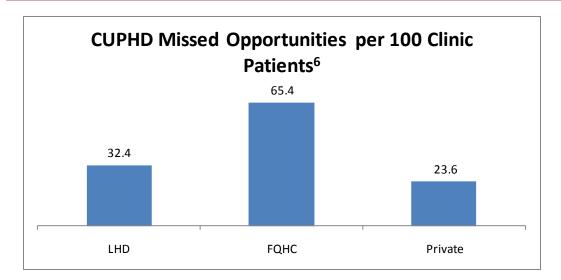


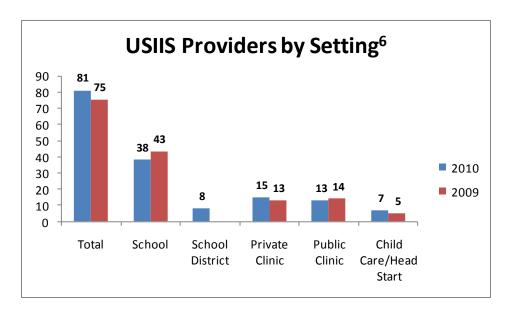


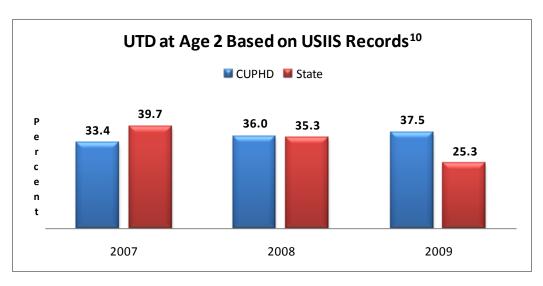










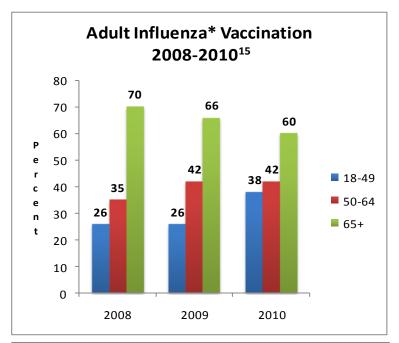


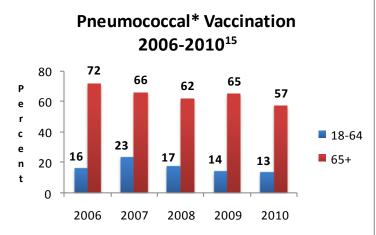


	Ju	ab	Mill	ard	N Sar	pete	Piu	ite	Sev	/ier	S Saı	npete	Tin	tic	Wa	yne
Central	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm	Total Exmp	Adeq Imm			Total Exmp	Adeq Imm	Total Exmp		Total Exmp		Total Exmp
Kindergarten School Entry	78.1%	7.3%	91.8%	4.8%	85.4%	7.5%	87.5%	6.3%	84.0%	5.1%	92.6%	3.9%	90.0%	N/A	79.2%	4.2%
Second- Dose Measles (K-12)	91.0%	8.9%	96.0%	4.1%	93.6%	6.0%	98.5%	1.5%	93.9%	5.7%	96.5%	3.4%	99.5%	0.5%	96.9%	2.1%
7th Grade Entry	81.4%	15.1%	94.2%	5.4%	94.8%	4.7%	88.9%	7.4%	91.1%	8.3%	94.2%	4.5%	95.8%	4.2%	96.1%	3.9%

Child and School Health 2010						
Group	Clinics/ Facilities	Enrollment				
WIC Women ¹¹	10	552				
WIC Infants ¹¹	10	530				
WIC Children ¹¹	10	1222				

Immunized for Child Care 2010⁶ Central Adequately Immunized Total Exemptions Child Care Facilities and Preschools 96.2% 0.5% Head Start Centers 80.2% 4.2%

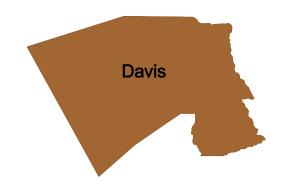






Population 2010 ¹	Number	% of Total
Total Population	312,918	
17 and Under	98,110	31.4%
18 to 34	86,464	27.6%
35 to 49	57,784	18.5%
50 to 64	44,577	14.2%
65 and Over	25,983	8.3%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	28,476	9.1%
17 and Under	10,302	10.5%*
18 to 34	5,707	6.6%*
35 to 49	6,992	12.1%*
50 to 64	**	**
65 and Over	2,702	10.4%*
Total 101-200% Poverty	55,700	17.8%
17 and Under	20,505	20.9%
18 to 34	16,428	19.0%
35 to 49	10,170	17.6%
50 to 64	3,923	8.8%*
65 and Over	3,923	15.1%*

Race/ Ethnicity ¹	2000	2004	2009
White	96.31%	96.01%	93.66%
Black	1.16%	1.32%	1.97%
American Indian/Alaska Native	0.62%	0.62%	1.01%
Asian	1.63%	1.70%	2.68%
Native Hawaiian & Other Pacific Islander	0.28%	0.35%	0.67%
Hispanic	5.40%	6.45%	7.88%



Population 2010 ¹	Number	% of Total
Total 0-18	102,827	
<1	6,220	6.0%
1-2	12,378	12.0%
3-5	17,744	17.3%
6-9	21,472	20.9%
10-14	25,422	24.7%
15-18	19,591	19.1%

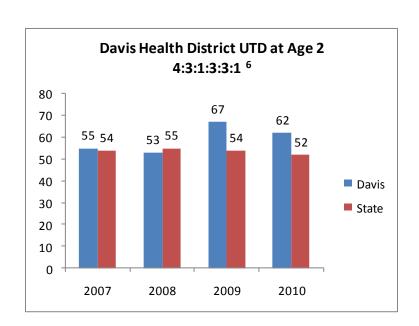
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	23,500	8.2%
17 and Under	4,600	4.7%
18 to 34	11,600	13.4%
35 to 49	4,400	7.7%
50 to 64	2,900	6.6%



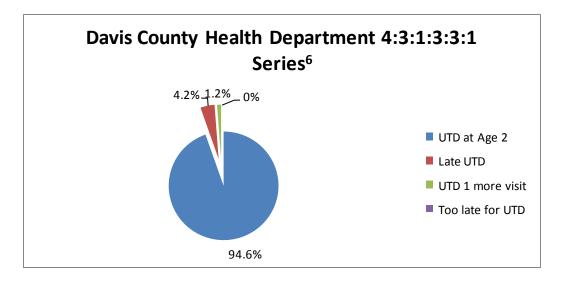
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	77.0%	88.2%	88.8%	77.5%	87.8%	88.7%	62.4%	58.8%, 66.0%

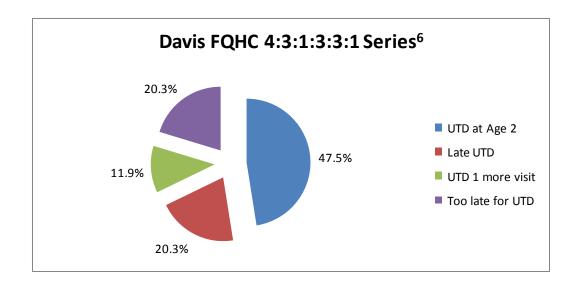
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	2009					
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	52.4%	47.8%, 57.0%	35.6%, 53.2%			
FQHC/RHC	47.5%	34.8%, 60.2%	NA			
Local Health Departments	94.6%	91.2%, 98.0%	94.1%, 99.8%			

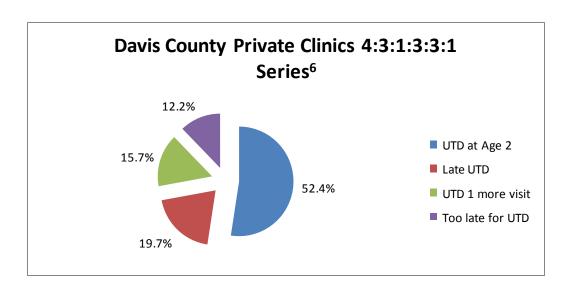
Health Care 2009						
Providers/Facilities	Number					
Private VFC Providers ⁶	24					
Public Medical Clinics ⁶	3					
Hospitals ⁷	5					
Long-term Care and Assisted Living Centers ⁸	27					
Local Health District Offices ⁶	2					



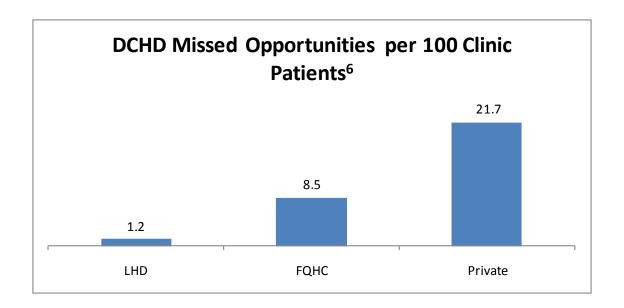


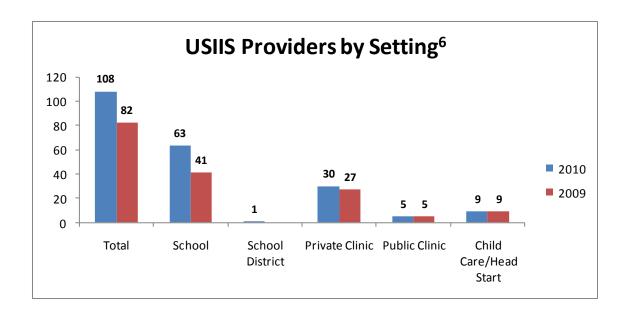










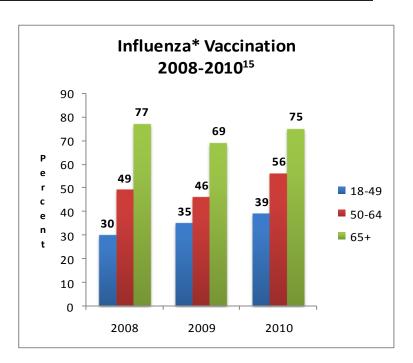


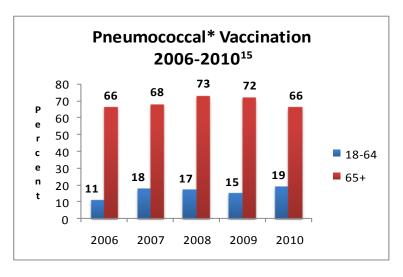


Adequately Immunized by School District 2010 ⁶						
	Davis School District					
Davis	Adequately Immunized	Total Exemptions				
Kindergarten School Entry	92.6%	2.9%				
Second-Dose Measles (K-12)	97.3%	2.4%				
7th Grade Entry	92.1%	3.5%				

Child & School Health 2010						
Group	Clinics/ Facilities	Enrollment				
WIC Women ¹¹	2	NA				
WIC Infants ¹¹	2	NA				
WIC Children ¹¹	2	NA				

Immunized for Child Care 2010 ⁶					
Davis	Adequately Immunized	Total Exemptions			
Child Care Facilities and Preschools	83.1%	2.1%			
Head Start Centers ⁺	73.4%	1.1%			





Population 2010 ¹	Numbor	% of Total
		/8 OI 10tai
Total Population	1,059,955	
17 and Under	315,815	29.8%
18 to 34	276,211	26.1%
35 to 49	213,404	20.1%
50 to 64	162,008	15.3%
65 and Over	92,517	8.7%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	103,876	9.8%
17 and Under	46,109	14.6%
18 to 34	29,002	10.5%
35 to 49	8,536	4.0%*
50 to 64	13,771	8.5%*
65 and Over	4,903	5.3%*
Total 101-200% Poverty	210,931	19.9%
17 and Under	82,112	26.0%
18 to 34	66,014	23.9%
35 to 49	42,467	19.9%
50 to 64	12,313	7.6%
65 and Over	15,543	16.8%

Race/ Ethnicity ¹	2000	2004	2009
White	93.79%	93.13%	90.18%
Black	1.19%	1.52%	2.50%
American Indian/Alaska Native	0.99%	1.01%	1.55%
Asian	2.71%	2.97%	3.96%
Native Hawaiian & Other Pacific Islander	1.33%	1.36%	1.81%
Hispanic	12.00%	13.93%	16.56%



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Population 2010 ¹	Number	% of Total
Total 0-18	331,200	
<1	19,312	5.8%
1-2	39,406	11.9%
3-5	56,617	17.1%
6-9	74,092	22.4%
10-14	80,748	24.4%
15-18	61,025	18.4%

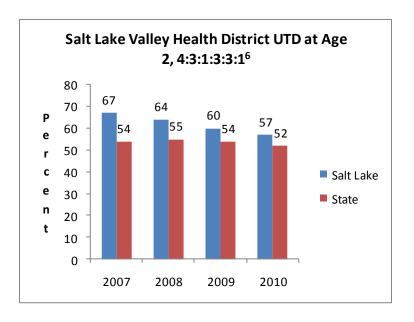
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	131,000	13.5%
17 and Under	27,500	8.7%
18 to 34	64,100	23.2%
35 to 49	26,000	12.2%
50 to 64	13,400	8.3%



CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	74.3%	87.7%	84.6%	75.0%	86.9%	84.3%	57.3%	55.6%, 59.0%

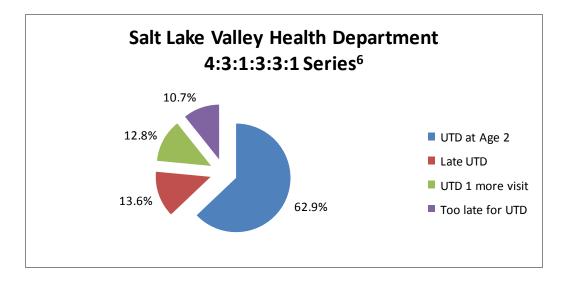
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	2	010	2009			
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	56.4%	54.5%, 58.3%	56.0%, 60.3%			
FQHC/RHC	NA	NA	NA			
Local Health Departments	62.9%	58.5%, 67.3%	58.8%, 61.5%			

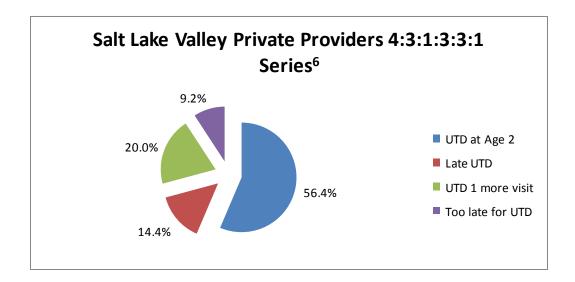
Health Care 2009					
Providers/Facilities	Number				
Private VFC Providers ⁶	74				
Public Medical Clinics ⁶	20				
Hospitals ^{7,*}	19				
Long-term Care and Assisted Living Centers ⁸	88				
Local Health District Offices ⁶	6				

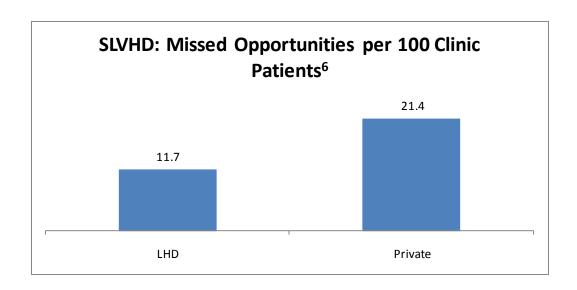


^{*}St. Mark's Hospital & University of Utah Medical Center NOT offering birth dose Hepatitis B vaccine.

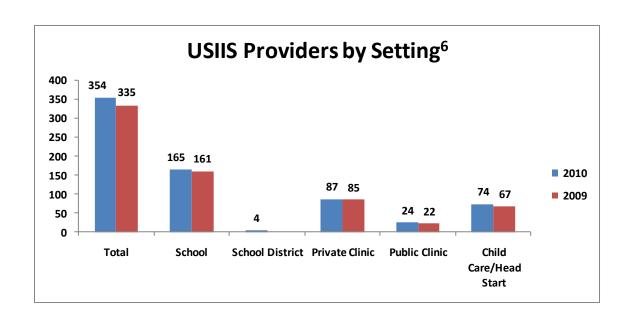










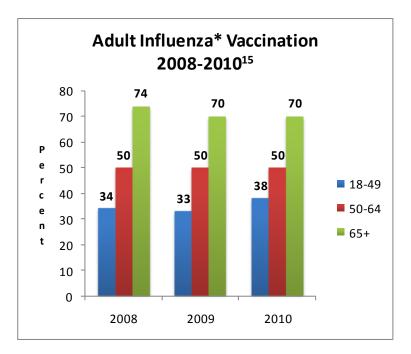


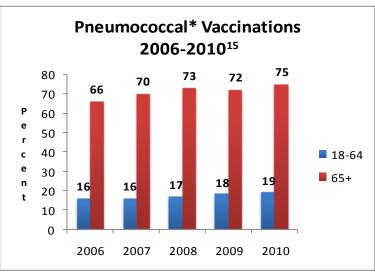


Adequately Immunized by School District 2010 ⁶										
	Ca	nyons	Gra	nite	Jor	dan	Mu	rray	Salt	Lake
Salt Lake	Adeq Imm	Total Exmp								
Kindergarten School Entry	91%	3.7%	93.3%	1.8%	88.4%	3.2%	86.0%	2.5%	84.1%	2.1%
Second-Dose Measles (K-12)	97.5%	2.3%	97.8%	1.9%	96.5%	2.7%	97.1%	2.2%	97.2%	1.2%
7th Grade Entry	93.2%	4.5%	97.1%	2.3%	87.3%	3.3%	94.6%	5.2%	83.3%	1.1%

Child and School Health 2010						
Group	Clinics/ Facilities	Enrollment				
WIC Women ¹¹	7	6,899				
WIC Infants ¹¹	7	6,708				
WIC Children ¹¹	7	14,058				

Immunized for Child Care 2010 ⁶				
Salt Lake	Adequately Immunized	Total Exemptions		
Child Care Facilities and Preschools	90.4%	1.6%		
Head Start Centers	72.1%	0.8%		





Population 2010 ¹	Number	% of Total
Total Population	56,693	
17 and Under	15,182	26.8%
18 to 34	15,301	27.0%
35 to 49	8,937	15.8%
50 to 64	10,040	17.7%
65 and Over	7,233	12.8%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	4,082	7.2%*
17 and Under	**	**
18 to 34	1,331	8.7%*
35 to 49	**	**
50 to 64	944	9.4%*
65 and Over	**	**
Total 101-200% Poverty	16,271	28.7%
17 and Under	4,858	32.0%
18 to 34	4,545	29.7%
35 to 49	2,082	23.3%
50 to 64	2,349	23.4%
65 and Over	2,481	34.3%

Race/ Ethnicity ¹	2000	2004	2009
White	83.19%	82.83%	81.09%
Black	0.25%	0.43%	0.93%
American Indian/Alaska Native	16.21%	16.27%	17.08%
Asian	0.29%	0.39%	0.66%
Native Hawaiian & Other Pacific Islander	0.06%	0.08%	0.24%
Hispanic	6.78%	7.43%	8.55%



Population 2010 ¹	Number	% of Total
Total 0-18	16,174	
<1	843	5.2%
1-2	1,621	10.0%
3-5	2,390	14.8%
6-9	3,279	20.3%
10-14	4,280	26.5%
15-18	3,761	23.3%
Population 2010 ¹	Number	% of Total
Carbon	20,105	35.5%
Emery	11,034	19.5%
Grand	9,644	17.0%
San Juan	15,910	28.1%

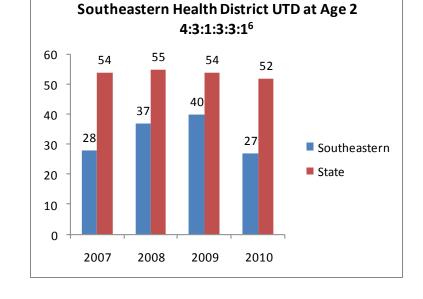
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	8,400	17.0%
17 and Under	1,500	9.7%
18 to 34	4,300	28.1%
35 to 49	1,400	15.5%
50 to 64	1,200	12.1%



CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶)6
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	40.1%	77.0%	67.3%	73.7%	79.3%	64.1%	27.2%	21.3%, 33.1%

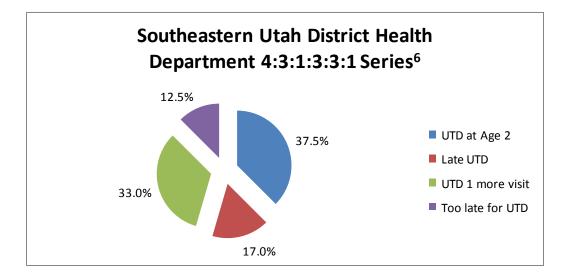
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	2010 2009					
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	22.3%	13.9%, 30.7%	24.9%, 46.3%			
FQHC/RHC	14.3%	6.3%, 29.4%	22.3%, 72.5%			
Local Health Departments	37.5%	27.4%, 47.6%	33.8%, 47.3%			

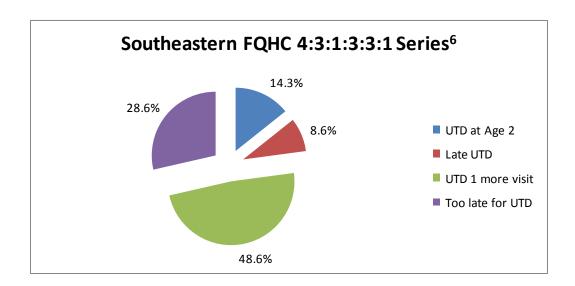
Health Care 2009						
Providers/Facilities	Number					
Private VFC Providers ⁶	4					
Public Medical Clinics ⁶	14					
Hospitals ^{7,*}	5					
Long-term Care and Assisted Living Cen- ters ⁸	7					
Local Health District Offices ⁶	5					

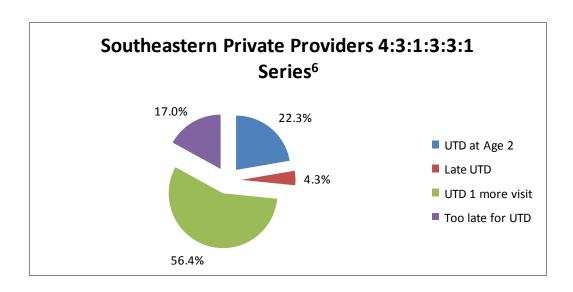


^{*}Allen Memorial Hospital & San Juan Hospital NOT offering birth dose Hepatitis B vaccine.

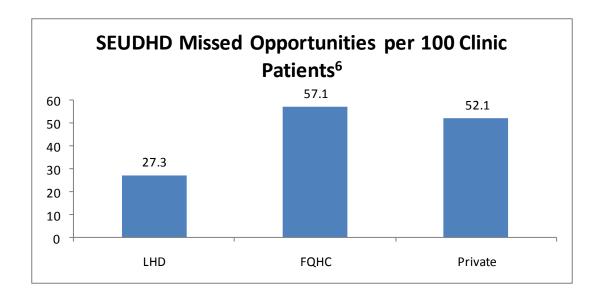


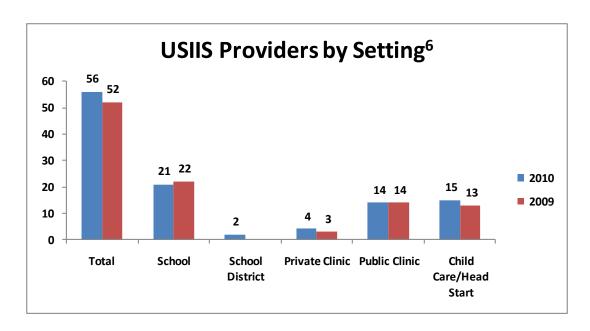










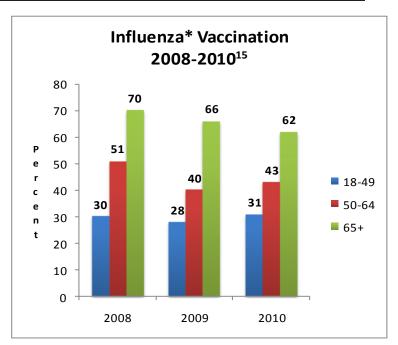


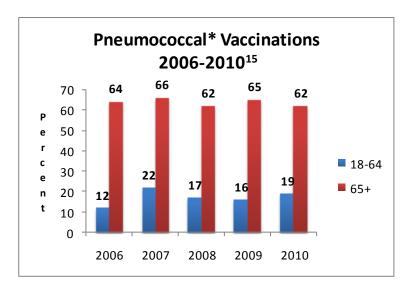


Adequately Immunized by School District 2010 ⁶								
	Carbon Emery Grand San Juan							uan
Southeastern	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp
Kindergarten School Entry	86.0%	2.7%	90.3%	2.6%	94.0%	5.8%	89.8%	4.7%
Second-Dose Measles (K-12)	96.4%	2.5%	96.1%	3.7%	97.0%	3.0%	97.0%	2.9%
7th Grade Entry	92.0%	2.8%	98.4%	1.6%	99.1%	0.9%	97.2%	2.8%

Child and School Health 2010							
Group	Clinics/ Facilities	Enrollment					
WIC Women ¹¹	6	390					
WIC Infants ¹¹	6	381					
WIC Children ¹¹	6	779					

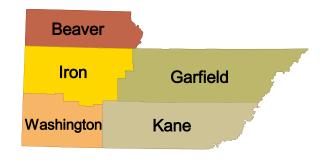
Immunized for Child Care 20106						
Southeastern	Adequately Immunized	Total Exemptions				
Child Care Facilities and Preschools	No Data	No Data				
Head Start Centers	81.5%	1.8%				





Population 2010 ¹	Number	% of Total
Total Population	214,377	
17 and Under	61,051	28.5%
18 to 34	57,324	26.7%
35 to 49	34,592	16.1%
50 to 64	29,666	13.8%
65 and Over	31,744	14.8%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	26,368	12.3%
17 and Under	8,486	13.9%*
18 to 34	10,376	18.1%*
35 to 49	3,079	8.9%*
50 to 64	2,403	8.1%*
65 and Over	**	**
Total 101-200% Poverty	65,385	30.5%
17 and Under	24,970	40.9%
18 to 34	17,541	30.6%
35 to 49	13,283	38.4%
50 to 64	5,696	19.2%
65 and Over	3,333	10.5%*

Race/ Ethnicity ¹	2000	2004	2009
White	97.09%	96.71%	94.58%
Black	0.26%	0.41%	0.96%
American Indian/Alaska Native	1.72%	1.72%	2.31%
Asian	0.55%	0.73%	1.37%
Native Hawaiian & Other Pacific Islander	0.38%	0.42%	0.79%
Hispanic	4.76%	5.76%	7.67%



Population 2010 ¹	Number	% of Total	
Total 0-18	64,666		
<1	3,836	5.9%	
1-2	8,074	12.5%	
3-5	11,387	17.6%	
6-9	13,598 21.0%		
10-14	15,348 23.7%		
15-18	12,423 19.2%		
Population 2010 ¹	Number	% of Total	
Beaver	6,692	3.1%	
Garfield	5,235	2.4%	
Iron	47,627	22.2%	
Kane	6,863	3.2%	
Washington	147,960	69.0%	

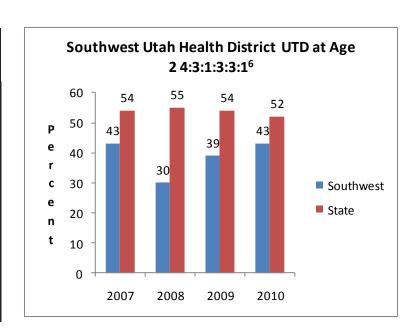
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	35,000	19.2%
17 and Under	7,600	12.4%
18 to 34	17,100	29.8%
35 to 49	5,800	16.8%
50 to 64	4,500	15.1%



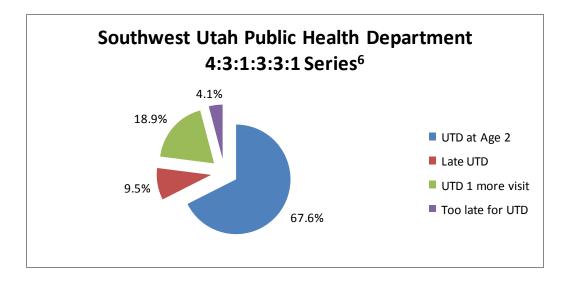
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	55.8%	81.8%	77.9%	71.4%	81.8%	76.3%	42.8%	40.2%, 45.4%

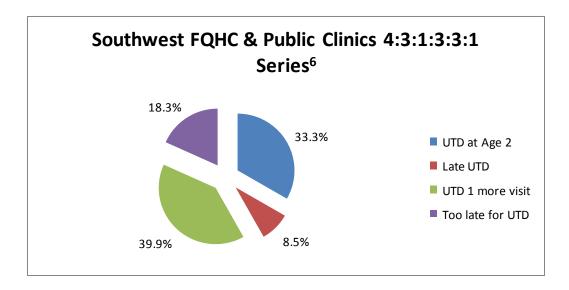
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	2010 2009					
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	43.0%	40.1%, 45.9%	34.1%, 40.1%			
FQHC/RHC	33.3%	27.0%, 39.6%	27.6%, 40.0%			
Local Health Departments	67.6%	56.9%, 78.3%	48.6%, 61.8%			

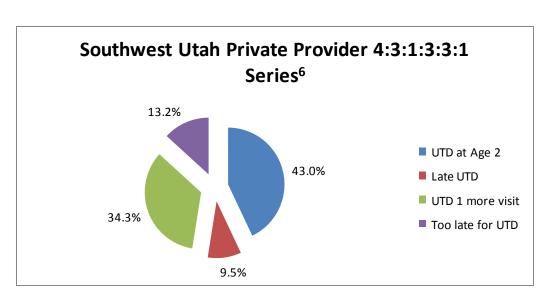
Health Care 2009					
Providers/Facilities	Number				
Private VFC Providers ⁶	18				
Public Medical Clinics ⁶	19				
Hospitals ^{7,*}	7				
Long-term Care and Assisted Living Centers ⁸	35				
Local Health District Offices ⁶	5				



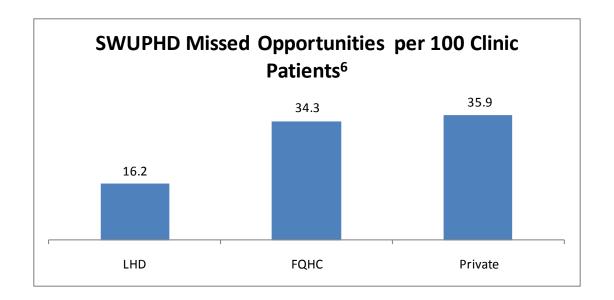


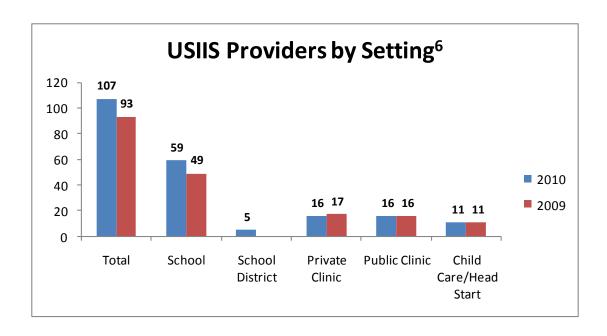










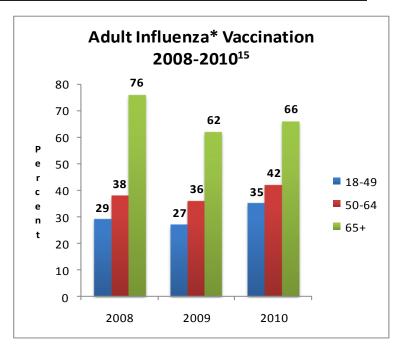


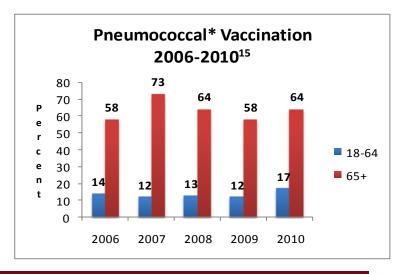
Į.	Adequately Immunized by School District 2010 ⁶									
	Beaver Garfield Iron Kane Washingt							ngton		
Southwest	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp	Adequate Immune	Total Exmp
Kindergarten School Entry	91.2%	3.7%	90.4%	3.6%	87.7%	4.1%	88.7%	4.7%	87.6%	4.6%
Second-Dose Measles (K-12)	97.6%	2.2%	98.3%	1.7%	96.1%	3.7%	96.1%	3.5%	95.2%	4.0%
7th Grade Entry	97.7%	0.8%	97.5%	1.3%	93.4%	4.6%	97.1%	2.9%	93.9%	4.6%

Child and School Health 2010							
Group	Clinics/ Facilities	Enrollment					
WIC Women ¹¹	5	1,296					
WIC Infants ¹¹	5	1,324					
WIC Children ¹¹	5	2,707					

Initionized for Child Care 2010								
Southwest	Adequately Immunized	Total Exemptions						
Child Care Facilities and Preschools	83.4%	2.0%						
Head Start Centers	95.0%	3.2%						

Immunized for Child Care 20106





Population 2010 ¹	Number	% of Total
Total Population	41,146	
17 and Under	10,053	24.4%
18 to 34	10,360	25.2%
35 to 49	8,874	21.6%
50 to 64	8,401	20.4%
65 and Over	3,458	8.4%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	**	**
17 and Under	**	**
18 to 34	**	**
35 to 49	**	**
50 to 64	**	**
65 and Over	**	**
Total 101-200% Poverty	4,855	11.8%*
17 and Under	1,086	10.8%*
18 to 34	**	**
35 to 49	586	6.6%*
50 to 64	479	5.7%*
65 and Over	778	22.5%*

Race/ Ethnicity ¹	2000	2004	2009
White	98.35%	97.94%	96.45%
Black	0.28%	0.44%	0.82%
American Indian/Alaska Native	0.34%	0.35%	0.66%
Asian	0.99%	1.23%	1.98%
Native Hawaiian & Other Pacific Islander	0.05%	0.04%	0.09%
Hispanic	8.15%	10.32%	12.52%



Population 2010 ¹	Number	% of Total
Total 0-18	10,689	
<1	548	5.1%
1-2	1,134	10.6%
3-5	1,743	16.3%
6-9	2,256	21.1%
10-14	2,629	24.6%
15-18	2,379	22.3%

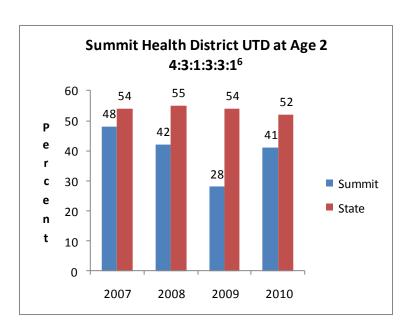
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	4,460	11.8%
17 and Under	760	7.5%
18 to 34	2,400	23.6%
35 to 49	800	9.4%
50 to 64	500	6.3%



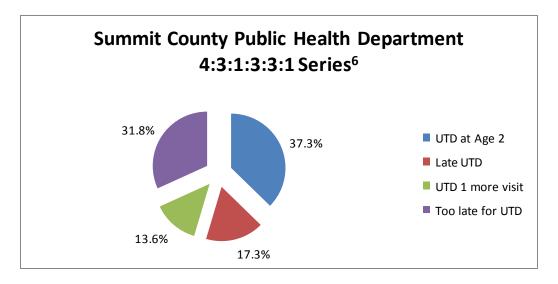
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	65.1%	77.6%	76.5%	75.4%	61.2%	78.3%	41.3%	35.5%, 47.1%

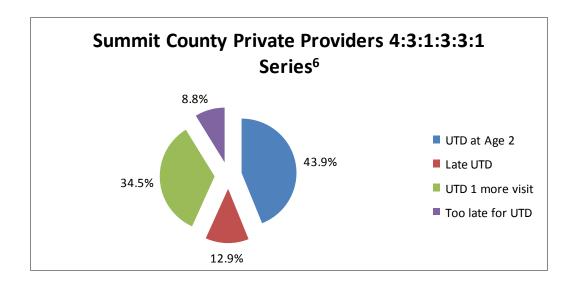
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶						
	20	010	2009			
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval			
All VFC Private Providers	43.9%	36.5%, 51.3%	24.2%, 53.4%			
FQHC/RHC	NA	NA	NA			
Local Health Department	37.3%	28.3%, 46.3%	2.6%, 26.6%			

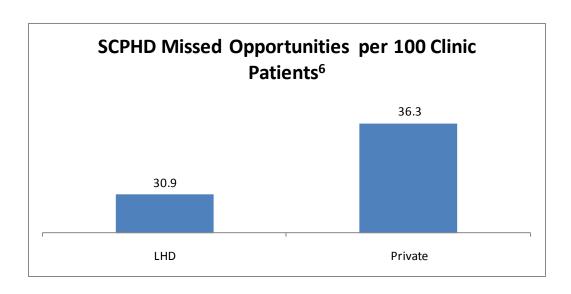
Health Care 2009					
Providers/Facilities	Number				
Private VFC Providers ⁶	4				
Public Medical Clinics ⁶	3				
Hospitals ⁷	0				
Long-term Care and Assisted Living Centers ⁸	1				
Local Health District Offices ⁶	3				



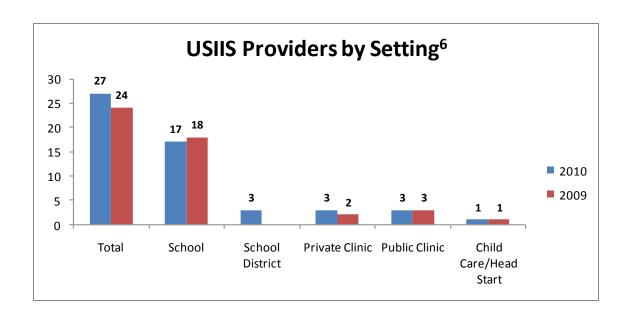










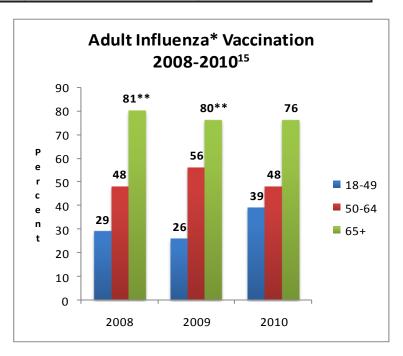


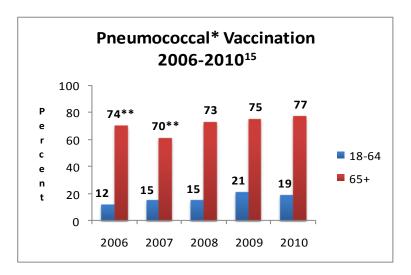


Adequately Immunized by School District 2010 ⁶									
	North S	North Summit Park City South Summit							
Summit	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions			
Kindergarten School Entry	95.7%	2.9%	91.0%	6.6%	88.8%	4.3%			
Second-Dose Measles (K-12)	97.3%	2.7%	95.4%	4.7%	97.7%	2.3%			
7th Grade Entry	97.5%	1.2%	93.2%	5.3%	95.0%	5.0%			

Child and School Health 2010			
Group	Clinics/ Facilities	Enrollment	
WIC Women ¹¹	2	143	
WIC Infants ¹¹	2	134	
WIC Children ¹¹	2	352	

Immunized for Child Care 2010 ⁶				
Summit	Adequately Immunized	Total Exemptions		
Child Care Facilities and Preschools	87.0%	4.3%		
Head Start Reported in Reported in Centers Davis HS Davis HS				



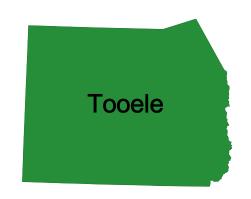


Tooele County Demographic and Socioeconomic Factors



Population 2010 ¹	Number	% of Total
Total Population	60,129	
17 and Under	19,191	31.9%
18 to 34	16,115	26.8%
35 to 49	11,981	19.9%
50 to 64	7,833	13.0%
65 and Over	5,009	8.3%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	3,728	6.2%*
17 and Under	1,593	8.3%*
18 to 34	774	4.8%*
35 to 49	647	5.4%*
50 to 64	**	**
65 and Over	**	**
Total 101-200% Poverty	17,377	28.9%
17 and Under	6,218	32.4%
18 to 34	4,496	27.9%
35 to 49	3,367	28.1%
50 to 64	1,833	23.4%
65 and Over	1,372	27.4%

Race/ Ethnicity ¹	2000	2004	2009
White	96.01%	95.64%	93.62%
Black	1.38%	1.48%	2.05%
American Indi- an/Alaska Native	1.77%	1.64%	2.30%
Asian	0.65%	0.79%	1.48%
Native Hawaiian & Other Pacific Islander	0.19%	0.45%	0.55%
Hispanic	10.46%	10.15%	10.73%



Population 2010 ¹	Number	% of Total
Total 0-18	20,102	
<1	1,045	5.2%
1-2	2,318	11.5%
3-5	3,390	16.9%
6-9	4,402	21.9%
10-14	5,168	25.7%
15-18	3,779	18.8%

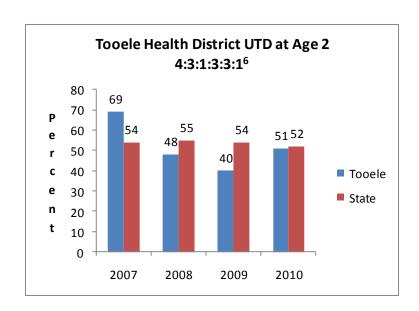
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	5,700	10.3%
17 and Under	900	4.9%
18 to 34	2,400	14.9%
35 to 49	1,700	13.9%
50 to 64	700	9.2%



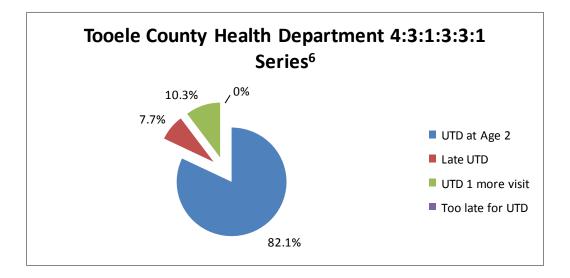
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
County	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95 % Confidence Interval
All Providers	57.1%	80.6%	70.9%	76.0%	78.6%	70.4%	51.0%	44.0%, 58.0%

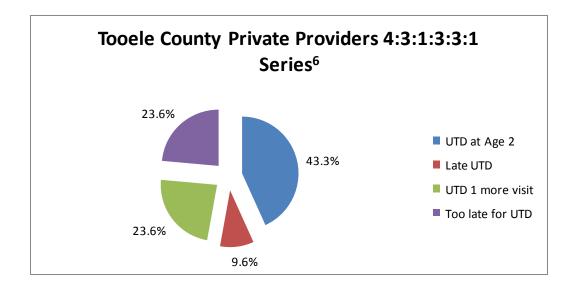
Up-	to-Date at Age 1	wo (4:3:1:3:3:1) 2	0106		
	2010 2009				
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval		
All VFC Private Providers	43.3%	35.5%, 51.1%	49.5%, 65.5%		
FQHC/RHC	NA	NA	NA		
Local Health Departments	82.1%	70.1%, 94.1%	28.4%, 38.0%		

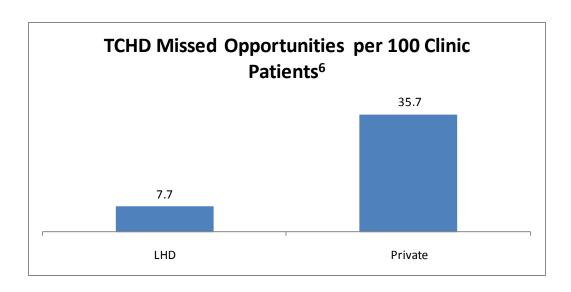
Health Care 2009			
Providers/Facilities	Number		
Private VFC Providers ⁶	9		
Public Medical Clinics ⁶	2		
Hospitals ⁷	1		
Long-term Care and Assisted Living Centers ⁸	5		
Local Health District Offices ⁶	1		



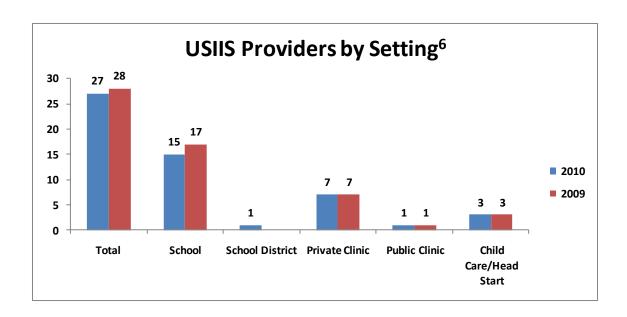










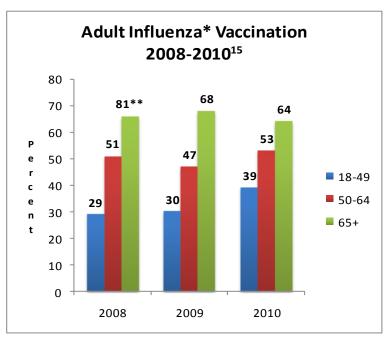


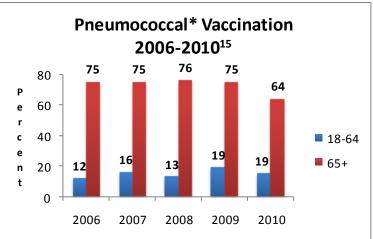


Adequately Immunized by School District 2010 ⁶				
	Tooele			
Tooele	Adequately Immunized Total Exemptions			
Kindergarten School Entry	95.5%	1.7%		
Second-Dose Measles (K-12)	98.2% 1.7%			
7th Grade Entry	96.8% 2.2%			

Child and School Health 2010			
Group	Clinics/ Facilities	Enrollment	
WIC Women ¹¹	2	442	
WIC Infants ¹¹	2	425	
WIC Children ¹¹	2	880	

Tooele Adequately Total Exemptions Child Care Facilities and Preschools Head Start Centers NA NA

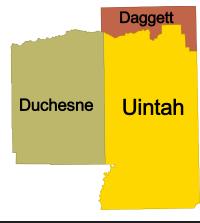






Population 2010 ¹	Number	% of Total
Total Population	50,484	
17 and Under	15,549	30.8%
18 to 34	13,724	27.2%
35 to 49	7,965	15.8%
50 to 64	7,751	15.4%
65 and Over	5,495	10.9%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	4,241	8.4%
17 and Under	1,648	10.6%*
18 to 34	1,234	9.0%*
35 to 49	828	10.4%*
50 to 64	**	**
65 and Over	**	**
Total 101-200% Poverty	11,611	23.0%
17 and Under	4,198	27.0%
18 to 34	3,019	22.0%
35 to 49	1,808	22.7%
50 to 64	969	12.5%*
65 and Over	1,484	27.0%

Race/ Ethnicity ¹	2000	2004	2009
White	91.58%	91.35%	89.79%
Black	0.16%	0.23%	0.71%
American Indian/Alaska Native	7.98%	8.10%	8.72%
Asian	0.22%	0.23%	0.64%
Native Hawaiian & Other Pacific Islander	0.07%	0.08%	0.15%
Hispanic	3.56%	4.20%	5.68%



Population 2010 ¹	Number	% of Total
Total 0-18	16,389	
<1	1,158	7.1%
1-2	2,153	13.1%
3-5	2,722	16.6%
6-9	3,325	20.3%
10-14	3,750	22.9%
15-18	3,281	20.0%
Population 2010 ¹	Number	% of Total
Daggett	988	2.0%
Duchesne	17,671	35.0%
Uintah	31,825	63.0%

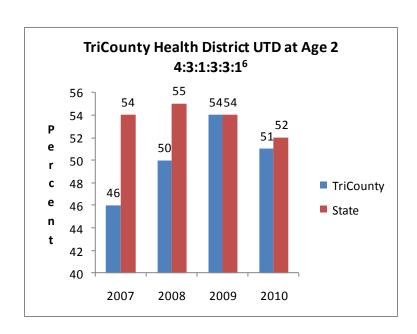
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	7,000	15.6%
17 and Under	1,400	9.1%
18 to 34	3,000	22.2%
35 to 49	1,300	16.3%
50 to 64	1,300	17.3%



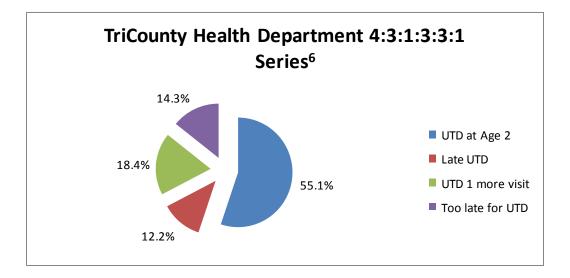
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	60.4%	80.0%	81.7%	72.7%	84.9%	77.7%	51.0%	47.9%, 54.1%

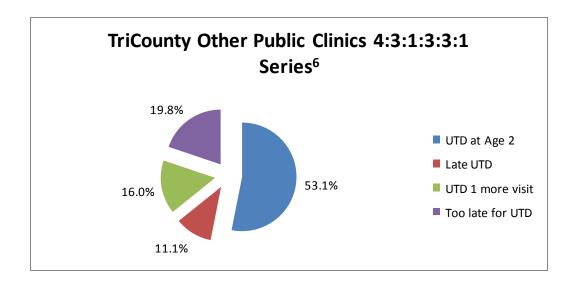
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶				
	2	010	2009	
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval	
All VFC Private Providers	50.5%	47.1%, 53.9%	51.1%, 58.3%	
FQHC/RHC	53.1%	42.2%, 64.0%	NA	
Local Health Departments	55.1%	41.2%, 69.0%	23.2%, 59.2%	

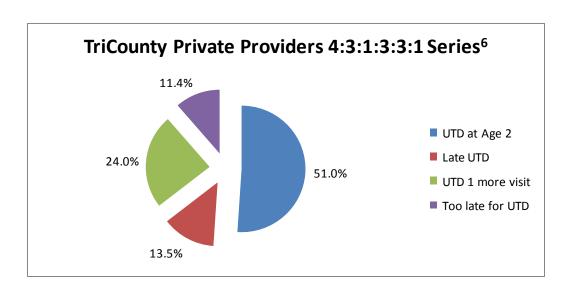
Health Care 2009				
Providers/Facilities	Number			
Private VFC Providers ⁶	6			
Public Medical Clinics ⁶	3			
Hospitals ⁷	3			
Long-term Care and Assisted Living Centers ⁸	6			
Local Health District Offices ⁶	2			



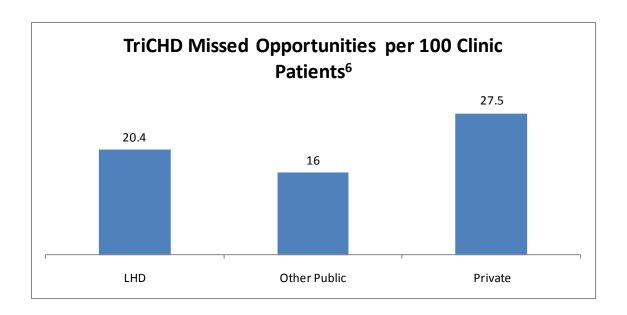


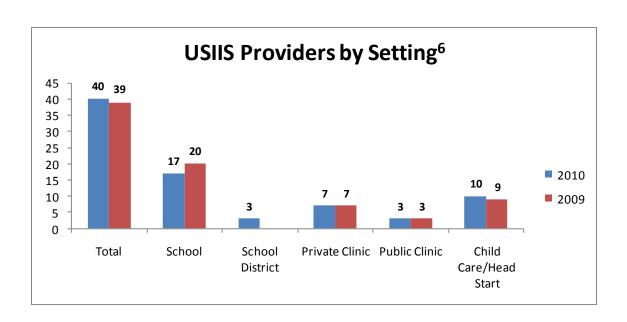










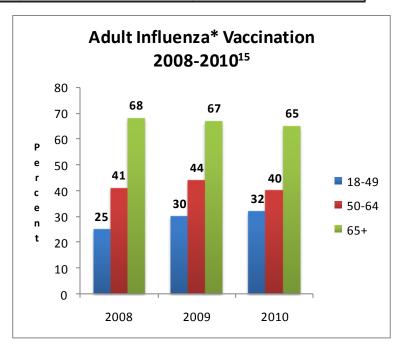


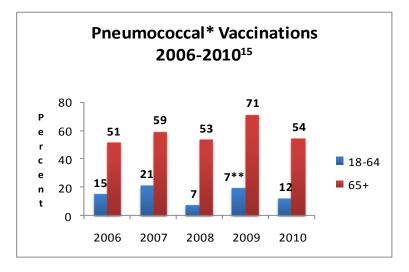


Adequately Immunized by School District 2010 ⁶						
	Dag	Daggett Duchesne Uintah				
TriCounty	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	95.4%	2.3%	93.0%	3.6%	85.5%	7.3%
Second-Dose Measles (K-12)	98.0%	2.0%	95.3%	4.6%	95.2%	4.6%
7th Grade Entry	100%	0%	93.0%	7.0%	91.4%	7.3%

Child and School Health 2010					
Group Clinics/ Facilities Enrollment					
WIC Women ¹¹	2	214			
WIC Infants ¹¹	2	210			
WIC Children ¹¹	2	328			

Immunized for Child Care 2010 ⁶					
TriCounty	Adequately Immunized	Total Exemptions			
Child Care Facilities and Preschools	95.8%	4.2%			
Head Start Centers	70.7%	6.9%			







Population 2010 ¹	Number	% of Total
Total Population	540,541	
17 and Under	184,821	34.2%
18 to 34	182,677	33.8%
35 to 49	81,952	15.2%
50 to 64	55,524	10.3%
65 and Over	35,567	6.6%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	52,433	9.7%
17 and Under	18,482	10.0%
18 to 34	17,537	9.6%*
35 to 49	7,294	8.9%*
50 to 64	8,218	14.8%*
65 and Over	**	**
Total 101-200% Poverty	117,838	21.8%
17 and Under	44,357	24.0%
18 to 34	49,323	27.0%
35 to 49	13,194	16.1%
50 to 64	6,829	12.3%*
65 and Over	4,553	12.8%*

Race/ Ethnicity ¹	2000	2004	2009
White	97.23%	96.92%	94.47%
Black	0.35%	0.51%	1.09%
American Indian/Alaska Native	0.65%	0.66%	1.15%
Asian	1.17%	1.29%	2.15%
Native Hawaiian & Other Pacific Islander	0.61%	0.62%	1.14%
Hispanic	7.04%	8.07%	9.85%



Population 2010 ¹	Number	% of Total
Total 0-18	195,202	
<1	12,563	6.4%
1-2	25,005	12.8%
3-5	35,176	18.0%
6-9	44,301	22.7%
10-14	43,978	22.5%
15-18	34,179	17.5%

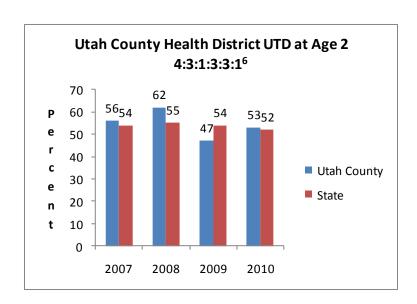
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	71,600	14.2%
17 and Under	16,300	8.8%
18 to 34	38,900	21.3%
35 to 49	12,200	14.9%
50 to 64	4,200	7.5%



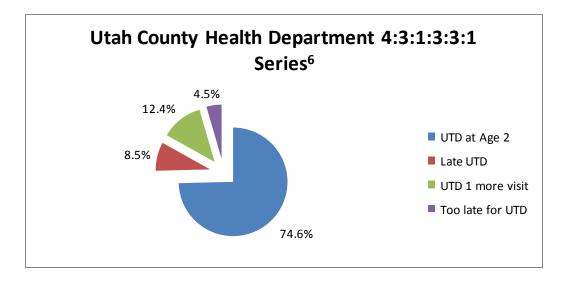
CoCASA: Up-to-Date at Age Two by Antigen 2010								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	64.9%	82.3%	82.5%	79.0%	80.2%	79.8%	53.3%	51.5%, 55.1%

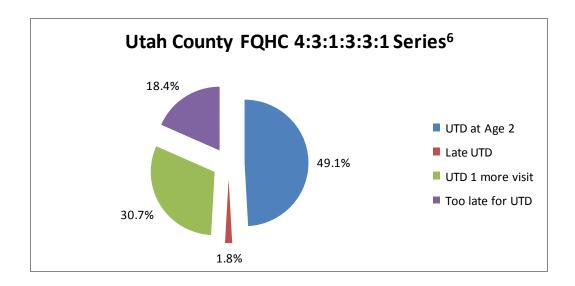
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶							
2010 2009							
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval				
All VFC Private Providers	52.2%	50.2%, 54.2%	42.6%, 46.7%				
FQHC/RHC	49.1%	43.2%, 55.0%	50.8%, 66.0%				
Local Health Departments	74.6%	68.2%, 81.0%	70.2%, 88.8%				

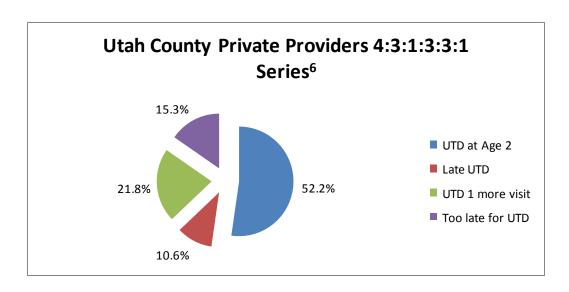
Health Care 2	009
Providers/Facilities	Number
Private VFC Providers ⁶	46
Public Medical Clinics ⁶	4
Hospitals ⁷	9
Long-term Care and Assisted Living Centers ⁸	57
Local Health District Offices ⁶	3



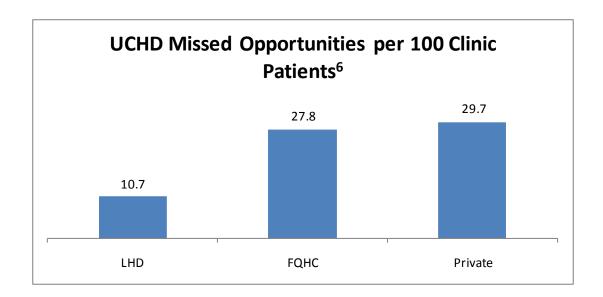


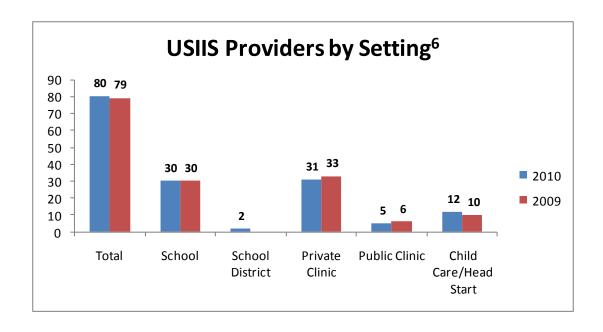














Adequately Immunized by School District 2010⁶

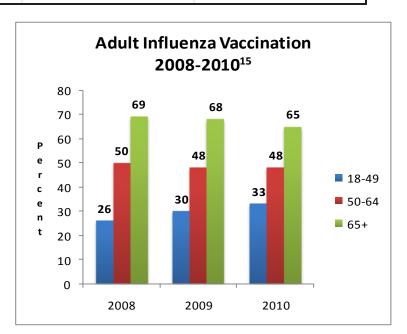
	Alpine		Nebo		Provo	
Utah County	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	88.9%	4.4%	87.7%	5.3%	87.8%	4.4%
Second-Dose Measles (K-12)	95.9%	3.7%	95.1%	4.5%	95.9%	3.5%
7th Grade Entry	91.9%	5.1%	91.8%	5.9%	94.7%	4.3%

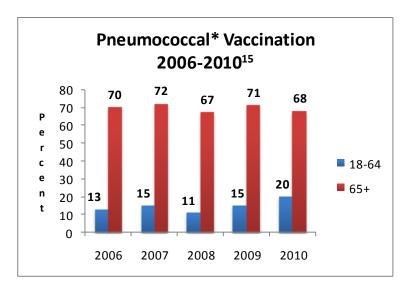
Child and School Health 2010

Group	Clinics/ Facilities	Enrollment
WIC Women ¹¹	4	3,738
WIC Infants ¹¹	4	3,310
WIC Children ¹¹	4	7,223

Immunized for Child Care 2010

Utah County	Adequately Immunized	Total Exemptions
Child Care Facilities and Preschools	82.4%	2.3%
Head Start Centers ⁺	95.8%	2.6%







Population 2010 ¹	Number	% of Total
Total Population	23,837	
17 and Under	6,921	29.0%
18 to 34	6,554	27.5%
35 to 49	4,604	19.3%
50 to 64	3,542	14.9%
65 and Over	2,216	9.3%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	2,551	10.7%*
17 and Under	768	11.1%*
18 to 34	1,140	17.4%*
35 to 49	295	6.4%*
50 to 64	**	**
65 and Over	**	**
Total 101-200% Poverty	3,528	14.8%
17 and Under	1,363	19.7%
18 to 34	1,127	17.2%*
35 to 49	539	11.7%*
50 to 64	383	10.8%*
65 and Over	**	**

Race/ Ethnicity ¹	2000	2004	2009
White	98.83%	98.53%	95.63%
Black	0.25%	0.31%	0.48%
American Indian/Alaska Native	0.52%	0.59%	2.14%
Asian	0.30%	0.46%	1.33%
Native Hawaiian & Other Pacific Islander	0.10%	0.11%	0.41%
Hispanic	4.57%	6.49%	10.62%



Population 2010 ¹	Number	% of Total
Total 0-18	7,312	
<1	405	5.5%
1-2	847	11.6%
3-5	1,241	17.0%
6-9	1,571	21.5%
10-14	1,760	24.1%
15-18	1,488	20.4%

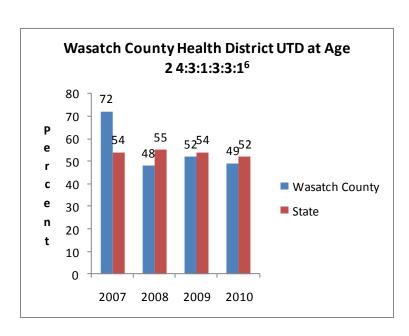
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	3,800	17.6%
17 and Under	700	9.9%
18 to 34	2,200	33.2%
35 to 49	700	15.2%
50 to 64	200	5.7%



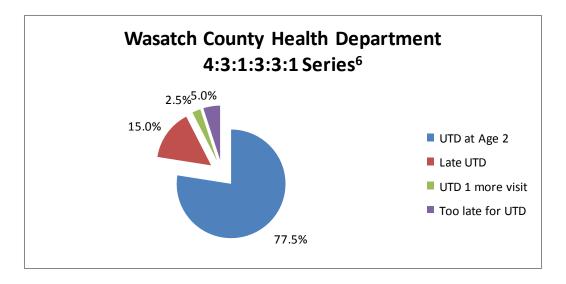
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶									
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval	
All Providers	60.8%	83.9%	73.1%	79.6%	75.5%	71.8%	49.2%	44.1%, 54.3%	

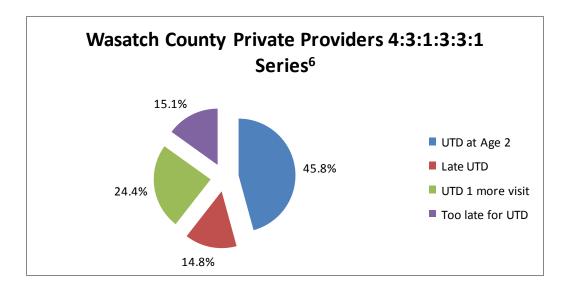
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶				
	2	2009		
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval	
All VFC Private Providers	45.8%	40.4%, 51.2%	44.1%, 55.3%	
FQHC/RHC	NA	NA	NA	
Local Health Departments	77.5%	64.6%, 90.4%	49.3%, 73.5%	

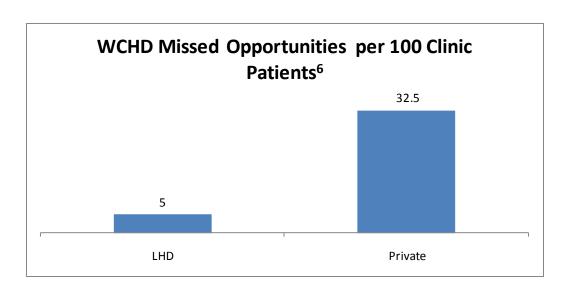
Health Care 2009		
Providers/Facilities	Number	
Private VFC Providers ⁶	3	
Public Medical Clinics ⁶	1	
Hospitals ⁷	2	
Long-term Care and Assisted Living Centers ⁸	2	
Local Health District Offices ⁶	1	



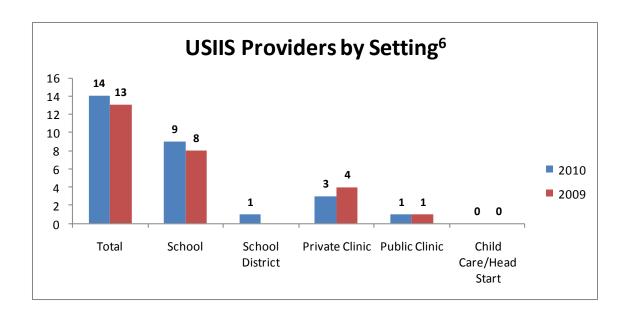










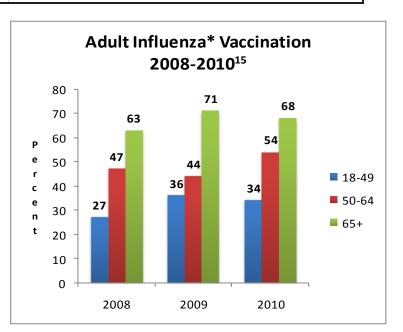


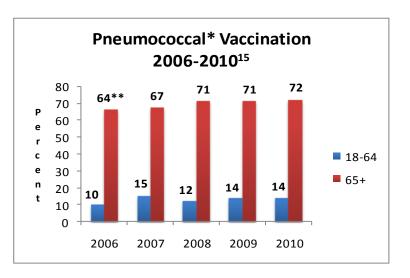


Adequately Immunized by School District 2010 ⁶			
	Wasatch		
Wasatch	Adequately Immunized	Total Exemptions	
Kindergarten School Entry	94.6%	5.4%	
Second-Dose Measles (K-12)	96.2%	3.7%	
7th Grade Entry	94.4%	5.0%	

Child and School Health 2010 Clinics/ **Enrollment** Group **Facilities** WIC Women¹¹ 1 136 WIC Infants¹¹ 1 131 WIC Children¹¹ 1 281

Immunized for Child Care 20106 Wasatch Adequately Total **Immunized Exemptions Child Care Facilities and** 96.4% 0% **Preschools Head Start** Reported in Reported in **Centers Utah Co HS Utah Co HS**





^{**}Use caution in interpreting, the estimate has a relative standard error greater than 30% and does not meet UDOH standards for reliability

[†]Data for Wasatch Head Start reported with Utah County.

Population 2010 ¹	Number	% of Total
Total Population	241,263	
17 and Under	72,173	29.9%
18 to 34	64,084	26.6%
35 to 49	44,033	18.3%
50 to 64	36,356	15.1%
65 and Over	24,617	10.2%
Poverty	Estimated Number 2010 ¹	% of Total 2007-2008 ²
Total 0-100% Poverty	19,301	8.0%*
17 and Under	**	**
18 to 34	**	**
35 to 49	2,598	5.9%
50 to 64	2,727	7.5%*
65 and Over	**	**
Total 101-200% Poverty	35,948	14.9%
17 and Under	15,301	21.2%*
18 to 34	6,344	9.9%*
35 to 49	7,486	17.0%*
50 to 64	3,163	8.7%*
65 and Over	4,160	16.9%*

Race/ Ethnicity ¹	2000	2004	2009
White	96.23%	96.12%	94.23%
Black	1.46%	1.47%	2.09%
American Indian/Alaska Native	0.83%	0.88%	1.38%
Asian	1.30%	1.33%	1.96%
Native Hawaiian & Other Pacific Islander	0.17%	0.19%	0.34%
Hispanic	12.36%	13.69%	15.66%



Population 2010 ¹	Number	% of Total
Total 0-18	75,832	
<1	4,532	6.0%
1-2	8,884	11.7%
3-5	12,619	16.6%
6-9	16,650	22.0%
10-14	18,813	24.8%
15-18	14,334	18.9%
Population 2009 ¹	Number	% of Total
Morgan	10,117	4.2%
Weber	231,146	95.8%

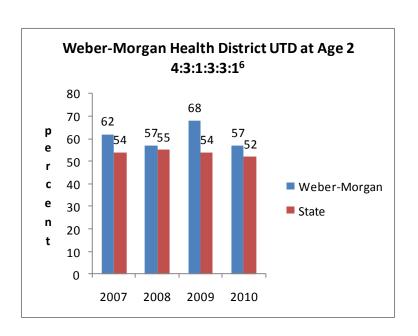
Uninsured	Estimated Number 2010 ¹	% of Total 2008-2009 ³
Total Uninsured (0-64)	25,900	12.0%
17 and Under	4,600	6.4%
18 to 34	14,400	22.5%
35 to 49	4,800	11.0%
50 to 64	2,100	5.8%



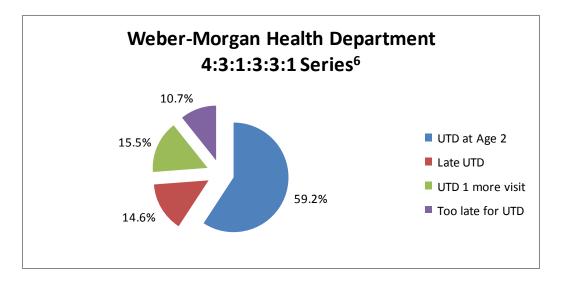
CoCASA: Up-to-Date at Age Two by Antigen 2010 ⁶								
	4 DTaP	3 Polio	1 MMR	3 Hib	3 Hep B	1 Varicella	4:3:1:3:3:1	95% Confidence Interval
All Providers	73.3%	88.4%	86.2%	76.5%	84.2%	85.5%	57.3%	54.8%, 59.8%

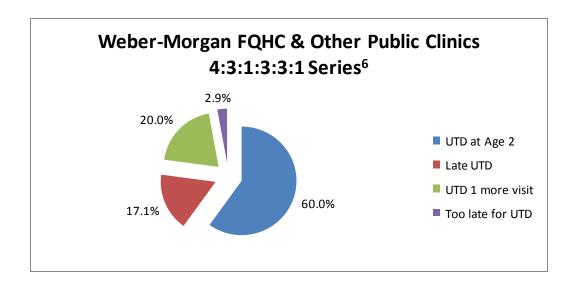
Up-to-Date at Age Two (4:3:1:3:3:1) 2010 ⁶				
	2	2009		
Provider Type	Point Estimate	95% Confidence Interval	95% Confidence Interval	
All VFC Private Providers	57.1%	54.5%, 59.7%	60.6%, 68.6%	
FQHC/RHC	60.0%	43.8%, 76.2%	75.3%, 92.1%	
Local Health Departments	59.2%	49.7%, 68.7%	66.5%, 85.9%	

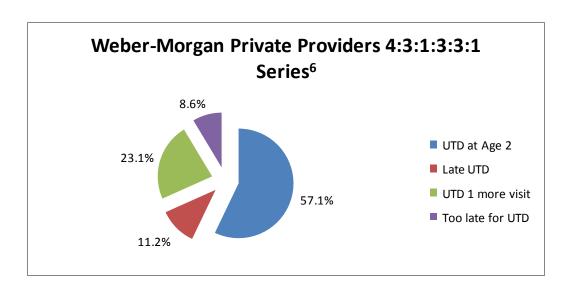
Health Care 2009			
Providers/Facilities	Number		
Private VFC Providers ⁶	22		
Public Medical Clinics ⁶	9		
Hospitals ⁷	3		
Long-term Care and Assisted Living Centers ⁸	20		
Local Health District Offices ⁶	1		



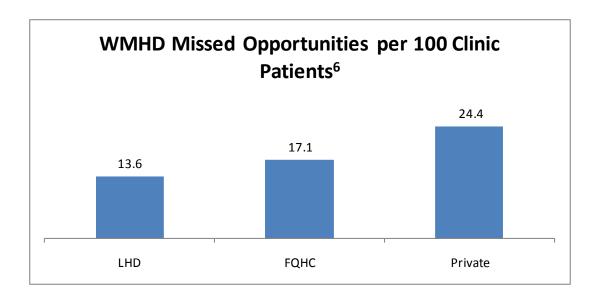


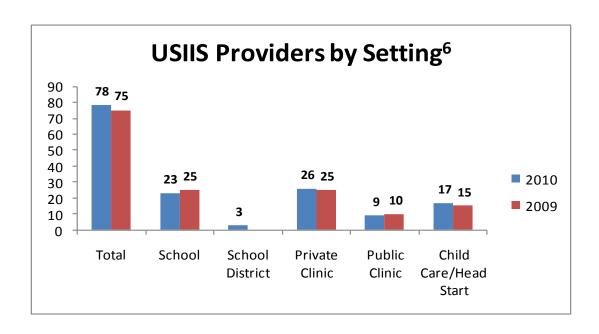








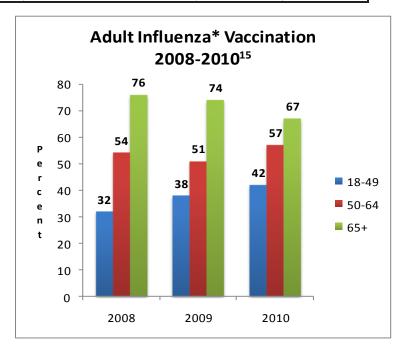


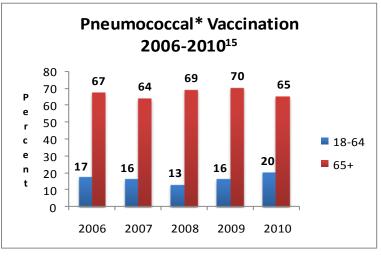


Adequately Immunized by School District 2010 ⁶						
	Morgan Ogden Weber					ber
Weber-Morgan	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions	Adequately Immunized	Total Exemptions
Kindergarten School Entry	92.5%	5.9%	95.8%	1.1%	93.2%	2.4%
Second-Dose Measles(K-12)	96.7%	3.2%	98.1%	1.7%	98.1%	1.7%
7th Grade Entry	90.7%	3.1%	96.7%	1.6%	94.5%	2.4%

Child and School Health 2010					
Group	Clinics/ Facilities	Enrollment			
WIC Women*	2	NA			
WIC Infants*	2	NA			
WIC Children*	2	NA			

Immunized for Child Care 2010 ⁶					
Weber-Morgan	Adequately Immunized	Total Exemptions			
Child Care Facilities and Preschools	90.1%	2.0%			
Head Start Centers [†]	96.0%	0.7%			





^{*} Head Start data for WMHD include data for Weber County only. Morgan County data included in DCHD.

Since 2007, the CDC has published the National Immunization Survey (NIS) for teen populations. This survey is similar to the childhood NIS. Survey responses are collected via telephone through random digit dialing. Those who participate are asked to provide health care provider information so their verbal responses over the phone can be validated through the official immunization record. Children ages 13-17 were included in the study. Participants were asked about receiving meningococcal conjugate vaccine (MCV4), MMR, Hepatitis B, Varicella, Td or Tdap, and HPV (beginning in 2007). The 2010 NIS included 19,488 adolescents (58.0% response rate) who had provider verified vaccination records. The CDC identifies three limitations in this survey: there could be bias due to non-response and households without landline telephones; underestimation of vaccine coverage may have occurred due to the exclusive use of provider verified records; 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 a national and state level, which can be seen in the tables below.

NIS Teen 2009, Ages 13-17					
Vaccine/Vaccine Series	Utah Coverage	National Coverage			
MCV4, 1 dose	42.0%	53.6%			
MMR, 2 doses	87.3%	89.1%			
Hepatitis B, 3 doses	80.6%	89.9%			
Varicella, 1 dose among teens without history of varicella disease	77.7%	87.0%			
Td, or Tdap, 1 dose	73.2%	76.2%			
Tdap, 1 dose	64.1%	55.6%			
HPV4, 1 dose (females)	32.5%	44.3%			

NIS Teen 2010, Ages 13-17 ⁱⁱ					
Vaccine/Vaccine Series	Utah Coverage	National Coverage			
MCV4, 1 dose	48.8%	62.7%			
MMR, 2 doses	86.7%	90.5%			
Hepatitis B, 3 doses	87.5%	91.6%			
Varicella, 1 dose among teens without history of varicella disease	87.2%	90.5%			
Td, or Tdap, 1 dose	77.3%	81.2%			
Tdap, 1 dose	68.8%	68.7%			
HPV4, 1 dose (females)	48.8%	48.7%			

Source: MMWR August 26, 2011/60(33);1118-1123

Each year the CDC conducts the NIS-Teen survey, which reports adolescent (13-17 years of age) coverage for catch-up vaccines as well as adolescent specific vaccines. The survey only includes several hundred Utah residents so it is impossible to discern coverage levels on a community level. For this reason adolescent immunization records were queried in USIIS to establish coverage levels for each of our 12 Local Health Districts (LHD) as of December 31, 2009.

A total of 55 clinics were randomly selected for inclusion in the sample, and the sample included at least one clinic from each of the 29 counties in Utah. The sample consisted of 37 private clinics, 13 health department clinics, and five federally qualified health centers (FQHC). Each clinic provided sufficient records to adequately represent its contribution to the total number of 13-17 year olds found in the state of Utah. The sample included a total of 1,254 adolescents. The sample distribution (based on county) of adolescents included in this study adequately represents the true state population distribution.

Vaccine histories were obtained for Td, Tdap, MMR, Hepatitis B, Varicella, history of Varicella disease, Meningococcal, and HPV. State coverage levels for each of these vaccines, as reported by USIIS, were compared to the state coverage reported in the NIS-Teen. A comparison of these two surveys would indicate how well USIIS reports "true" immunization coverage. If the coverage levels matched between the two data sources, then it would be appropriate to report for each LHD.

USIIS and NIS-Teen coverage levels agreed for 1 Tdap, 1 Meningococcal, and HPV. These are the adolescent specific vaccines. Coverage levels for 1 Td or Tdap, 2 MMR, 3 Hep B, and Varicella did not agree (Table 1). This may indicate that recently administered vaccines are being entered into USIIS accurately and consistently, but clinics are not retroactively reporting older immunization dates.

Tables for key adolescent immunizations can be seen in the next 3 tables. Local Health Districts in bold are significantly lower than the State average.

Table 1 Adolescent coverage with 1 Tdap by Local Health District

LHD	Point Estimate Coverage	95% CI
BRHD	69.1%	58.1% to 80.1%
CUPHD	65.9%	51.9% to 79.9%
DCHD	59.1%	50.9% to 67.3%
SLVHD	59.3%	54.9% to 63.7%
SEUPHD	60.0%	42.5% to 77.5%
SWUPHD	71.1%	60.9% to 81.3%
SCHD	57.9%	35.7% to 80.1%
TCHD	42.4%	25.5% to 59.3%
TRCHD	63.2%	41.5% to 84.9%
UCHD	42.4%	36.1% to 48.7%
WCHD	50.0%	21.7% to 78.3%
WMHD	61.3%	52.2% to 70.4%

Table 2 Adolescent vaccination coverage with 1 Meningococcal by LHD

LHD	Point Estimate Coverage	95% CI
BRHD	38.2%	26.7% to 49.7%
CUPHD	31.8%	18.0% to 45.6%
DCHD	42.3%	34.0% to 50.6%
SLVHD	45.4%	40.9% to 49.9%
SEUPHD	20.0%	5.7% to 34.3%
SWUPHD	31.6%	21.1% to 42.1%
SCHD	52.6%	30.1% to 75.1%
TCHD	27.3%	12.1% to 42.5%
TRCHD	21.1%	2.8% to 39.4%
UCHD	21.6%	16.3% to 26.9%
WCHD	50.0%	21.7% to 78.3%
WMHD	55.0%	45.7% to 64.3%

Table 3 Adolescent vaccination covereage with HPV among females by LHD, numbers in parenthese are 95% confidence intervals

LHD	3 HPV	2 HPV	1 HPV
BRHD	22.6% (7.9% to 37.3%)	16.1% (3.2% to 29.0%)	6.5% (1.8% to 20.7%)
CUPHD	59.1% (38.6% to 79.6%)	54.5% (33.7% to 75.3%)	27.3% (8.7% to 45.9%)
DCHD	29.4% (18.6% to 40.2%)	16.2% (7.4% to 25.0%)	11.8% (4.1% to 19.5%)
SLVHD	42.1% (35.6% to 48.6%)	29.0% (23.0% to 35.0%)	19.0% (13.8% to 24.2%)
SEUPHD	7.7% (1.4% to 33.3%)	0.0% (0.0% to 22.8%)	0.0% (0.0% to 22.8%)
SWUPHD	32.6% (18.6% to 46.6%)	11.6% (2.0% to 21.2%)	4.7% (1.3% to 15.5%)
SCHD	7.7% (1.4% to 33.3%)	7.7% (1.4% to 33.3%)	7.7% (1.4% to 33.3%)
TCHD	56.0% (36.5% to 75.5%)	36.0% (17.2% to 54.8%)	16.0% (1.7% to 30.3%)
TRCHD	50.0% (19.0% to 81.0%)	20.0% (5.7% to 51.0%)	20.0% (5.7% to 51.0%)
UCHD	24.2% (16.7% to 31.7%)	12.1% (6.4% to 17.8%)	4.8% (1.1% to 8.5%)
WCHD	40.0% (11.8% to 76.9%)	20.0% (3.6% to 62.4%)	20.0% (3.6% to 62.4%)
WMHD	42.1% (29.3% to 54.9%)	26.3% (14.9% to 37.7%)	14.0% (5.0% to 23.0%)

Historically, Utah immunization coverage reported through CoCASA has been significantly lower than what is reported for Utah in the NIS. Consequently a sample of children 19-35 months was taken from the USIIS database to determine coverage for the 4:3:1:3:3:1 series. The sample included 1,322 children from each of the LHDs. For most LHD's there were not enough children included to create coverage levels. The WMHD, DCHD, SLVHD, and UCHD were combined and reported as Wasatch Front, the remaining LHD were combined to form non-Wasatch Front. Results can be seen in Table 1. The results here are higher than the Co-CASA assessments but not as high as the NIS. An additional assessment which includes a larger sample from the smaller LHD is necessary for follow-up.

Table 1 Utah Up-to-date at age 2 4:3:1:3:3:1

Geographic Location	# children up-to- date	Total Sample	Percent up-to- date	Lower Limit	Upper Limit
Utah	762	1,322	57.6%	55.0%	60.3%
Wasatch Front	601	976	61.6%	58.5%	64.6%
Non-Wasatch Front	161	346	46.5%	41.3%	51.8%

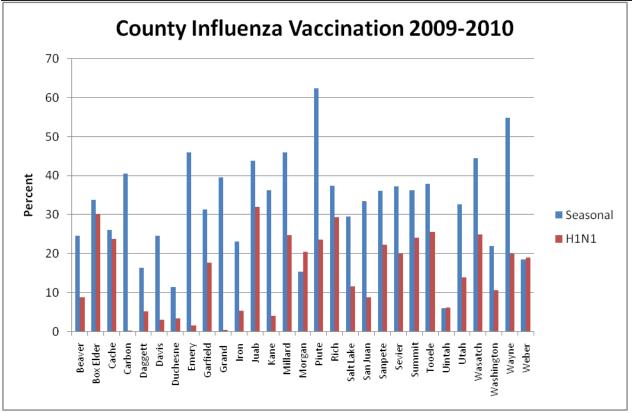
Rotavirus vaccination rates for 2006 through 2010 were calculated from children younger than 3 in Utah from USIIS queries. Rates are reported for initiating the series (1 dose), 2 doses (incomplete series) and completed series (2 or 3 doses depending on brand). Significant gains were experienced between 2006 and 2009. There was an increase in rates from 2009 to 2010, but this increase was not significant.

Year	1 dose	95% CI	2 doses	95% CI	Completed series	95% CI
2006	2.7%	1.6% to 3.8%	1.6%	0.7% to 2.5%	0.7%	0.1% to 1.3%
2007	22.9%	18.7% to 27.1%	16.1%	12.4% to 19.8%	9.1%	6.2% to 12.0%
2008	48.7%	44.0% to 53.8%	38.4%	33.6% to 43.2%	25.6%	21.3% to 29.9%
2009	66.7%	61.9% to 71.5%	53.7%	48.6% to 58.8%	39.9%	34.9% to 44.9%
2010	72.0%	67.1% to 76.9%	60.2%	54.9% to 65.5%	43.8%	38.4% to 49.2%

In May of 2010, a USIIS query was made to understand vaccination levels for seasonal influenza as well as H1N1 for the 2009/2010 flu season. Vaccine doses were counted from September 1, 2009 through April 30, 2010. The data were organized into the following age categories: <2 (infant), 2-4 (preschool age), 5-11 (elementary school), 12-14 (junior high), 15-18 (high school), 19-34, 35-64, and 65+. The data were also organized by ZIP code, so the data could be organized and analyzed by local health district (LHD), county, and small areas. There were over two million records included in this query, which represents about 74% of the entire population. Results by age for the entire state of Utah and coverage by county can be seen below. For both vaccines, coverage among children peaked at age two to 4 years. There was a second peak for adults 65+ years, but coverage dropped with increasing age for the H1N1 vaccines.

Table 1 Influenza vaccination coverage for the State of Utah, 2009-2010

Age Group	Seasonal	H1N1
<2	17.8%	16.8%
2-4	35.8%	20.8%
5-11	30.1%	15.9%
12-14	20.8%	11.1%
15-18	18.7%	9.2%
19-34	15.6%	8.3%
35-64	35.9%	16.4%
65+	71.8%	11.3%
All ages	28.7%	13.2%



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 and 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 health care facilities, and type I and type II assisted living facilities. All 291 of the care facilities now operating reported for 2010.

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

Hepatitis B immunizations: given at any time to an employee having direct patient

contact

(Note: A percentage in *italics* indicates there was a statistically significant improvement from the previous year (p<0.05)

State of Utah: 291 Facilities					
	Number	Flu	Pneumococcal		
Residents	15,778	78.8%	60.5%		
	Number	Flu	Hepatitis B		
All Employees	16,833	52.0%	NA		
Employees with Direct Patient Care	12,349	NA	53.1%		

Bear River Health District: 17 Facilities					
Number Flu Pneumocod					
Residents	821	80.9%	69.7%		
	Number	Flu	Hepatitis B		
All Employees	1,319	65.9%	NA		
Employees with Direct Patient Care	971	NA	56.2%		

Central Utah Public Health District: 18 Facilities				
	Number	Flu	Pneumococcal	
Residents	421	92.0%	69.4%	
	Number	Flu	Hepatitis B	
All Employees	613	64.0%	NA	
Employees with Direct Patient Care	474	NA	67.7%	

Davis County Health District: 27 Facilities					
Number Flu Pneumo					
Residents	1,566	76.6%	53.6%		
	Number	Flu	Hepatitis B		
All Employees	1,750	57.3%	NA		
Employees with Direct Patient Care	1,346	NA	39.5%		

Salt Lake Val	ley Health Di	strict: 92 F	acilities
	Number	Flu	Pneumococcal
Residents	6,109	76.4%	58.4%
	Number	Flu	Hepatitis B
All Employees	5,932	48.3%	NA
Employees with Direct Patient Care	4,299	NA	49.4%

Southeastern Utah Public Health District: 7 Facilities					
	Number	Flu	Pneumococcal		
Residents	271	86.0%	39.5%		
	Number	Flu	Hepatitis B		
All Employees	324	52.2%	NA		
Employees with Direct Patient Care	182	NA	34.1%		

Southwest Utah Public Health District: 34 Facilities				
	Number	Flu	Pneumococcal	
Residents	1,633	74.2%	48.7%	
	Number	Flu	Hepatitis B	
All Employees	1,540	57.4%	NA	
Employees with Direct Patient Care	1,086	NA	56.5%	

Summit Cour	nty Health D	istrict: 1 F	acility		
Number Flu Pneumoco					
Residents	36	80.6%	11.1%		
	Number	Flu	Hepatitis B		
All Employees	26	30.8%	NA		
Employees with Direct Patient Care	14	NA	0.0%		

Tooele County Health District: 5 Facilities				
	Number	Flu	Pneumococcal	
Residents	155	91.0%	71.0%	
	Number	Flu	Hepatitis B	
All Employees	177	55.0%	NA	
Employees with Direct Patient Care	148	NA	59.5%	

TriCounty Health District: 6 Facilities					
Number Flu Pneumococo					
Residents	290	75.2%	70.0%		
	Number	Flu	Hepatitis B		
All Employees	540	67.8%	NA		
Employees with Direct Patient Care	384	NA	62.5%		

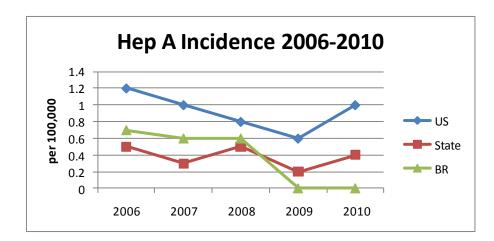
Utah County Health District: 60 Facilities					
Number Flu Pneumoco					
Residents	2,577	78.5%	67.4%		
	Number	Flu	Hepatitis B		
All Employees	2,797	48.0%	NA		
Employees with Direct Patient Care	2,125	NA	59.8%		

Wasatch County Health District: 2 Facilities				
	Number	Flu	Pneumococcal	
Residents	60	76.7%	80.0%	
	Number	Flu	Hepatitis B	
All Employees	60	60.0%	NA	
Employees with Direct Patient Care	34	NA	67.7%	

Weber-Morga	n Health Di	strict: 24 F	acilities
	Number	Flu	Pneumococcal
Residents	1,899	87.1%	69.2%
	Number	Flu	Hepatitis B
All Employees	1,815	41.3%	NA
Employees with Direct Patient Care	1,320	NA	58.0%

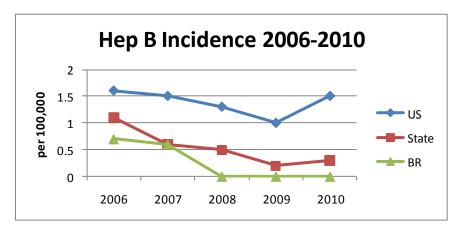
Bear River Health District

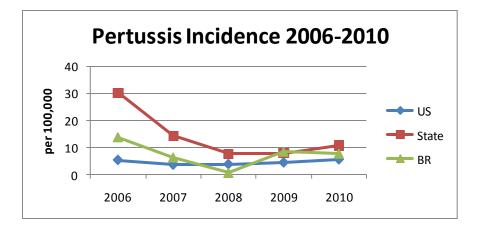
Hepatitis A, Hepatitis B, and Pertussis are diseases that are preventable through immunization. Trends in vaccine-preventable diseases are tracked with the intent that the data can be helpful in developing collaborative immunization campaign efforts. The following data were provided by the Office of Epidemiology, Utah Department of Health, for statewide and local health districts. National data were obtained from the CDC. The 2010 U.S. rates were estimated from provisional data found on the CDC website. 2010 US data should be viewed as only an estimate. Pertussis incidence is an estimate based on numbers reported so far and could be much higher.



Hepatitis A				
Year	US	State	BR	
2006	1.2	0.5	0.7	
2007	1.0	0.3	0.6	
2008	0.8	0.5	0.6	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.0	

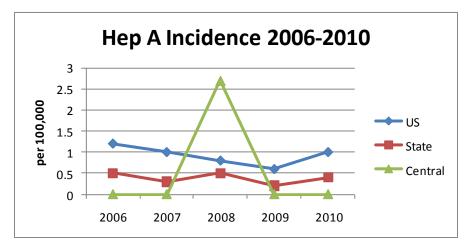
Hepatitis B					
Year	US	State	BR		
2006	1.6	1.1	0.7		
2007	1.5	0.6	0.6		
2008	1.3	0.5	0.0		
2009	1.1	0.2	0.0		
2010	1.5	0.3	0.0		





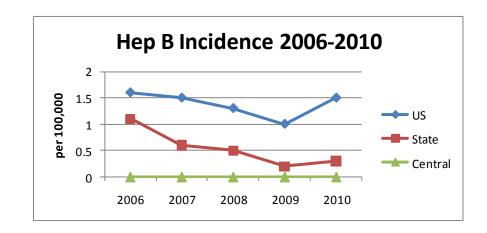
Pertussis					
Year	US	State	BR		
2006	5.3	30.1	13.8		
2007	3.6	14.3	6.3		
2008	3.8	7.6	0.6		
2009	4.4	7.8	8.4		
2010	5.5	10.7	7.7		

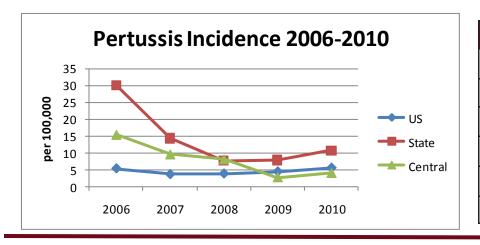
Central Utah Public Health District



	Hepatitis A				
Year	US	State	Central		
2006	1.2	0.5	0.0		
2007	1.0	0.3	0.0		
2008	0.8	0.5	2.7		
2009	0.6	0.2	0.0		
2010	1.0	0.4	0.0		

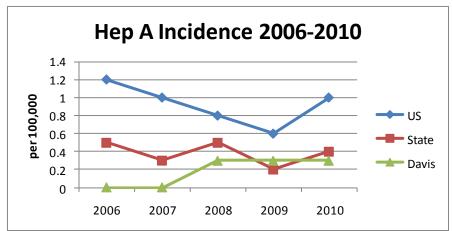
Hepatitis B				
Year	US	State	Central	
2006	1.6	1.1	0.0	
2007	1.5	0.6	0.0	
2008	1.3	0.5	0.0	
2009	1.0	0.2	0.0	
2010	1.5	0.3	0.0	





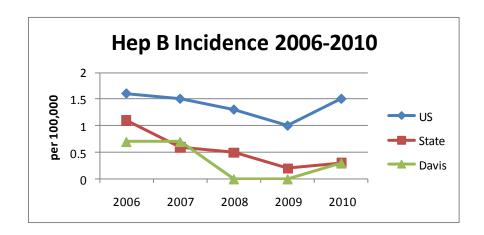
Pertussis				
Year	US	State	Central	
2006	5.3	30.1	15.4	
2007	3.6	14.3	9.5	
2008	3.8	7.6	8.0	
2009	4.4	7.8	2.6	
2010	5.5	10.7	3.9	

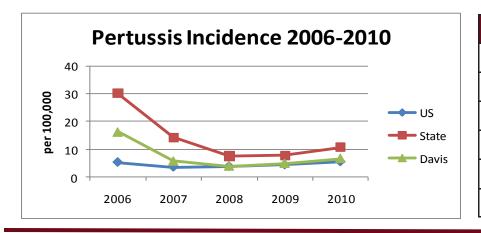
Davis County Health District



	Hepatitis A					
Year	US	State	Davis			
2006	1.2	0.5	0.0			
2007	1.0	0.3	0.0			
2008	0.8	0.5	0.3			
2009	0.6	0.2	0.3			
2010	1.0	0.4	0.3			

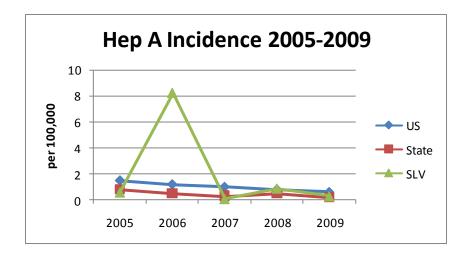
Hepatitis B				
Year	US	State	Davis	
2006	1.6	1.1	0.7	
2007	1.5	0.6	0.7	
2008	1.3	0.5	0.0	
2009	1.0	0.2	0.0	
2010	1.5	0.3	0.3	





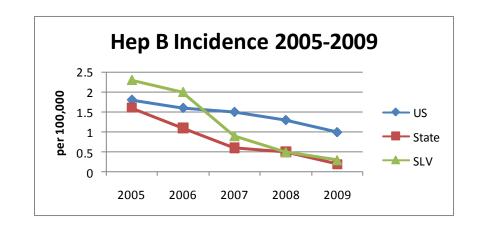
Pertussis					
Year	US	State	Davis		
2006	5.3	30.1	16.3		
2007	3.6	14.3	5.7		
2008	3.8	7.6	3.9		
2009	4.4	7.8	4.9		
2010	5.5	10.7	6.7		

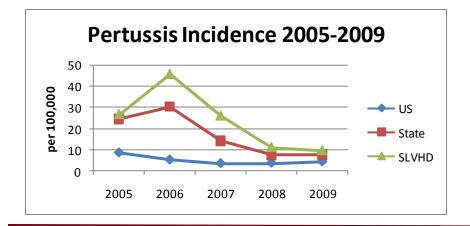
Salt Lake Valley Health District



	Hepatitis A				
Year	US	State	SLV		
2006	1.2	0.5	8.2		
2007	1.0	0.3	0.1		
2008	0.8	0.5	0.9		
2009	0.6	0.2	0.3		
2010	1.0	0.4	0.4		

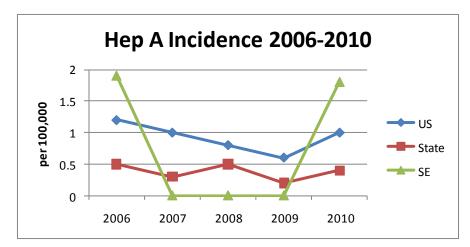
Hepatitis B				
Year	US	State	SLV	
2006	1.6	1.1	2.0	
2007	1.5	0.6	0.9	
2008	1.3	0.5	0.5	
2009	1.0	0.2	0.3	
2010	1.5	0.3	0.7	





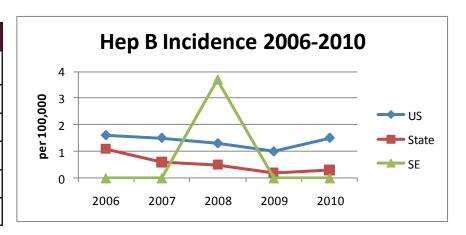
Pertussis					
Year	US	State	SLV		
2006	5.3	30.1	45.6		
2007	3.6	14.3	26.0		
2008	3.8	7.6	11.2		
2009	4.4	7.8	9.7		
2010	5.5	10.7	17.2		

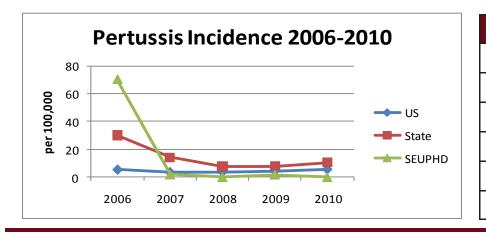
Southeastern Utah Health District



	Hepatitis A				
Year	US	State	SE		
2006	1.2	0.5	1.9		
2007	1.0	0.3	0.0		
2008	0.8	0.5	0.0		
2009	0.6	0.2	0.0		
2010	1.0	0.4	1.8		

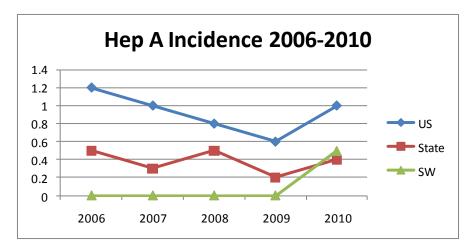
Hepatitis B				
Year	US	State	SE	
2006	1.6	1.1	0.0	
2007	1.5	0.6	0.0	
2008	1.3	0.5	3.7	
2009	1.0	0.2	0.0	
2010	1.5	0.3	0.0	





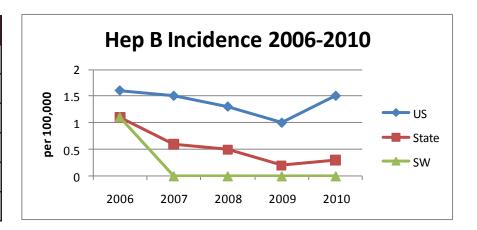
Pertussis				
Year	US	State	SE	
2006	5.3	30.1	70.5	
2007	3.6	14.3	1.9	
2008	3.8	7.6	0.0	
2009	4.4	7.8	1.8	
2010	5.5	10.7	0.0	

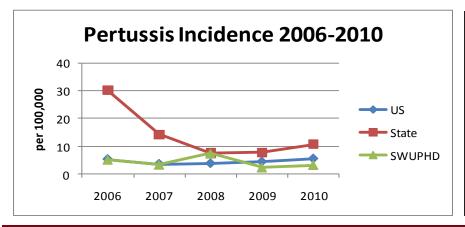
Southwest Utah Public Health District



	Hepatitis A			
Year	US	State	SW	
2006	1.2	0.5	1.1	
2007	1.0	0.3	0.0	
2008	0.8	0.5	0.0	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.5	

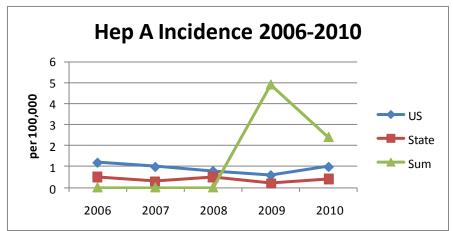
Hepatitis B			
Year	US	State	SW
2006	1.6	1.1	1.1
2007	1.5	0.6	0.0
2007	1.3	0.5	0.0
2009	1.0	0.2	0.0
2010	1.5	0.3	0.0





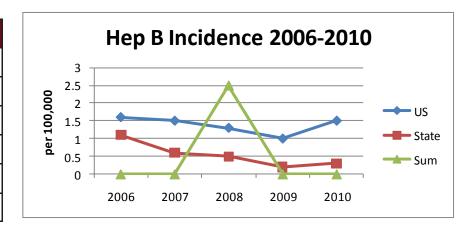
Pertussis			
Year	US	State	SW
2006	5.3	30.1	5.2
2007	3.6	14.3	3.4
2008	3.8	7.6	7.4
2009	4.4	7.8	2.4
2010	5.5	10.7	3.3

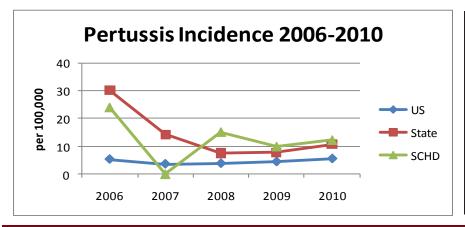
Summit County Health District



	Hepatitis A				
Year	US	State	Sum		
2006	1.2	0.5	0.0		
2007	1.0	0.3	0.0		
2008	0.8	0.5	0.0		
2009	0.6	0.2	4.9		
2010	1.0	0.4	2.4		

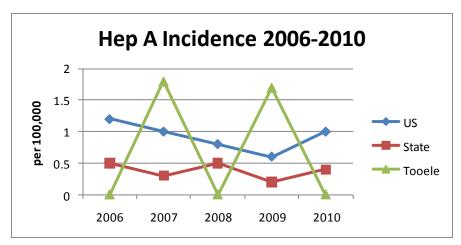
Hepatitis B				
Year	US	State	Sum	
2006	1.6	1.1	0.0	
2007	1.5	0.6	0.0	
2008	1.3	0.5	2.5	
2009	1.0	0.2	0.0	
2010	1.5	0.3	0.0	





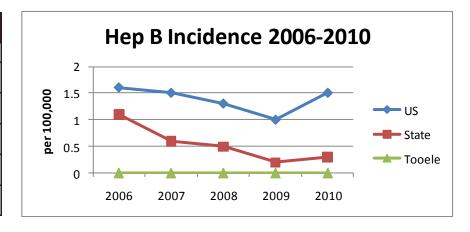
Pertussis			
Year	US	State	Sum
2006	5.3	30.1	23.9
2007	3.6	14.3	0.0
2008	3.8	7.6	15.1
2009	4.4	7.8	9.9
2010	5.5	10.7	12.2

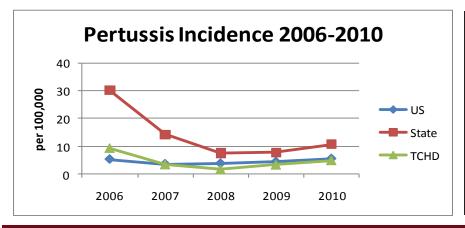
Tooele County Health District



Hepatitis A			
Year	US	State	Tooele
2006	1.2	0.5	0.0
2007	1.0	0.3	1.8
2008	0.8	0.5	0.0
2009	0.6	0.2	1.7
2010	1.0	0.4	0.0

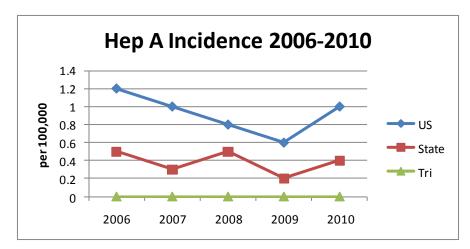
Hepatitis B			
Year	US	State	Tooele
2006	1.6	1.1	0.0
2007	1.5	0.6	0.0
2008	1.3	0.5	0.0
2009	1.0	0.2	0.0
2010	1.5	0.3	0.0





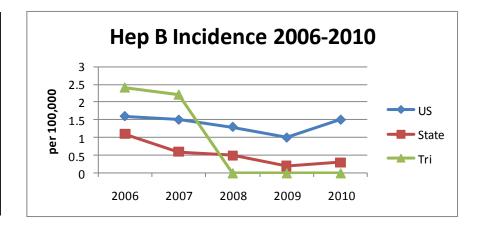
Pertussis			
Year	US	State	Tooele
2006	5.3	30.1	9.4
2007	3.6	14.3	3.5
2008	3.8	7.6	1.7
2009	4.4	7.8	3.4
2010	5.5	10.7	5.0

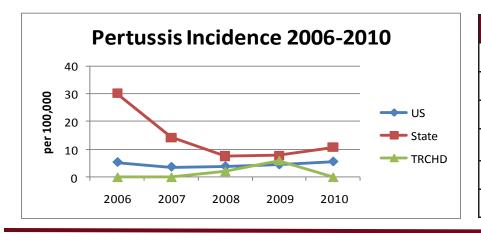
TriCounty Health District



	Hepatitis A			
Year	US	State	TriCo	
2006	1.2	0.5	0.0	
2007	1.0	0.3	0.0	
2008	0.8	0.5	0.0	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.0	

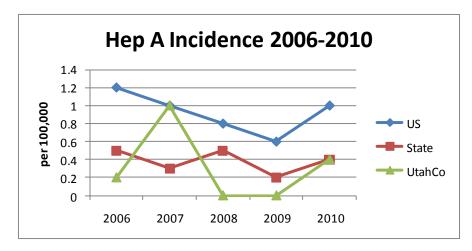
Hepatitis B				
Year	US	State	TriCo	
2006	1.6	1.1	2.4	
2007	1.5	0.6	2.2	
2008	1.3	0.5	0.0	
2009	1.0	0.2	0.0	
2010	1.5	0.3	0.0	





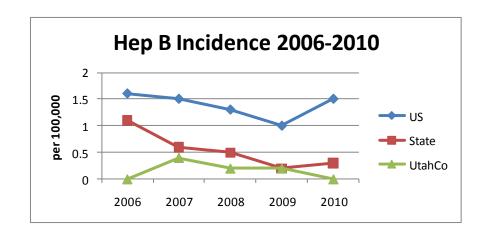
Pertussis				
Year	US	State	TriCo	
2006	5.3	30.1	0.0	
2007	3.6	14.3	0.0	
2008	3.8	7.6	2.1	
2009	4.4	7.8	6.0	
2010	5.5	10.7	0.0	

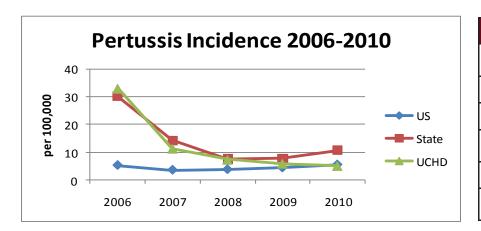
Utah County Health District



Hepatitis A				
Year	US	State	UtahCo	
2006	1.2	0.5	0.2	
2007	1.0	0.3	1.0	
2008	0.8	0.5	0.0	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.4	

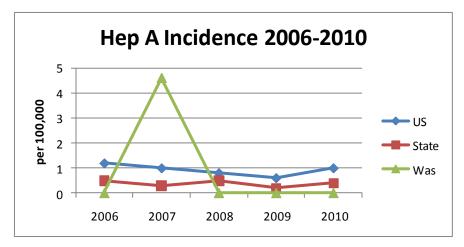
Hepatitis B				
Year	US	State	UtahCo	
2006	1.6	1.1	0.0	
2007	1.5	0.6	0.4	
2008	1.3	0.5	0.2	
2009	1.0	0.2	0.2	
2010	1.5	0.3	0.0	





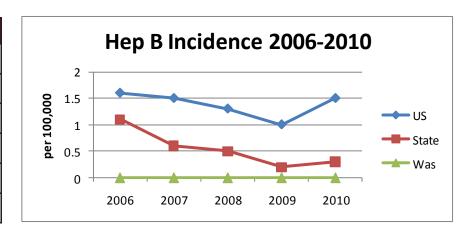
Pertussis				
Year	US	State	UtahCo	
2006	5.3	30.1	33.0	
2007	3.6	14.3	11.4	
2008	3.8	7.6	7.4	
2009	4.4	7.8	6.0	
2010	5.5	10.7	5.2	

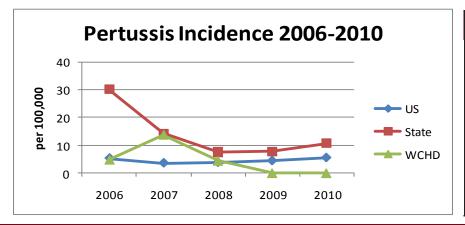
Wasatch County Health District



Hepatitis A				
Year	US	State	Was	
2006	1.2	0.5	0.0	
2007	1.0	0.3	4.6	
2007	0.8	0.5	0.0	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.0	

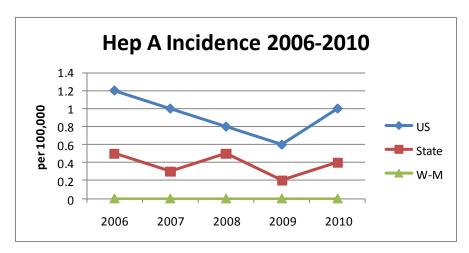
Hepatitis B			
Year	US	State	Was
2006	1.6	1.1	0.0
2007	1.5	0.6	0.0
2008	1.3	0.5	0.0
2009	1.0	0.2	0.0
2010	1.5	0.3	0.0





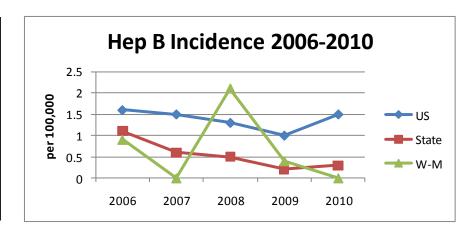
Pertussis				
Year	US	State	Was	
2006	5.3	30.1	4.8	
2007	3.6	14.3	13.7	
2008	3.8	7.6	4.4	
2009	4.4	7.8	0.0	
2010	5.5	10.7	0.0	

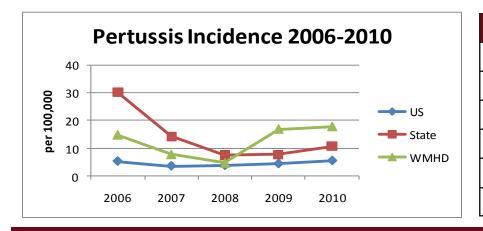
Weber-Morgan Health District



Hepatitis A				
Year	US	State	W-M	
2006	1.2	0.5	0.0	
2007	1.0	0.3	0.0	
2008	0.8	0.5	0.0	
2009	0.6	0.2	0.0	
2010	1.0	0.4	0.0	

Hepatitis B				
Year	US	State	W-M	
2006	1.6	1.1	0.9	
2007	1.5	0.6	0.0	
2008	1.3	0.5	2.1	
2009	1.0	0.2	0.4	
2010	1.5	0.3	0.0	



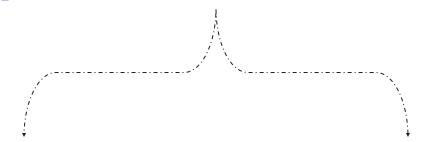


Pertussis					
Year	US	State	W-M		
2006	5.3	30.1	14.8		
2007	3.6	14.3	7.8		
2008	3.8	7.6	4.7		
2009	4.4	7.8	16.9		
2010	5.5	10.7	17.8		

Influenza (flu) is a very contagious viral infection of the nose, throat, bronchial tubes, and lungs. Flu is a respiratory infection and generally does not involve gastrointestinal symptoms, except in very young children. It is estimated that 30 to 60 million U.S. residents get the flu each year. About 100,000 of them are hospitalized and an estimated 36,000 die each year from complications (primarily pneumonia) associated with the infection. Populations that are particularly susceptible to influenza include adults 65 years and older (more than 90% of all influenza deaths), children less than 24 months, people with cardiovascular disease, chronic respiratory disease, and chronic metabolic disease such as diabetes.

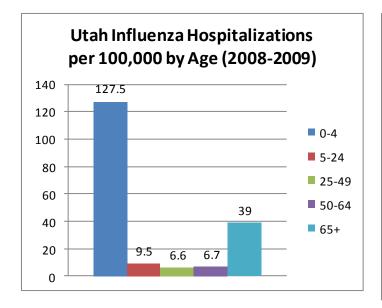
Flu vaccine is up to 90% effective in preventing illness for healthy populations younger than 65, but effectiveness is contingent upon the strains used in the vaccine being similar to the strains that circulate during flu season. For populations older than 65 years, the vaccine is 30-40% effective in preventing illness, 50-60% in preventing hospitalization, and 80% effective in preventing death. There are two "Utah Influenza Hospitalizations per 100,000" bar graphs below and the 2009-2010 Influenza year was associated with the 2009 Pandemic Influenza A (H1N1).

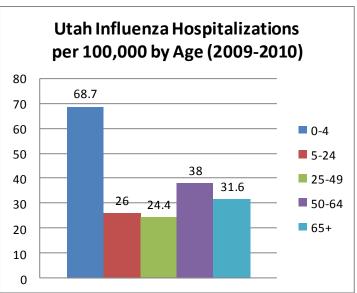
Comparison of two different Influenza Seasons



Seasonal Influenza and its Impact

Seasonal and H1N1 Influenza and its Impact





- 1. *Utah Governor's Office of Planning and Budget*. Retrieved on April 13, 2010 from Utah Department of Health, Center for Health Data, Indicator-Based Information System for Public Health website: http://ibis.health.utah.gov/.
- 2. Office of Public Health Assessment (2010, July). 2007-2009 Utah Healthcare Access Survey IBIS-PH [Data file]. Salt Lake City, UT: Utah Department of Health. **Note: numbers rounded to the nearest 100 persons.**
- 3. Office of Public Health Assessment (2010, July). 2007-2009 Utah Healthcare Access Survey IBIS-PH [Data file]. Salt Lake City, UT: Utah Department of Health. **Note: numbers rounded to the nearest 100 persons**.
- 4. Office of Public Health Assessment (2010, July). 2009 Utah Healthcare Access Survey [Data file]. Salt Lake City, UT: Utah Department of Health.
- 5. CHEC Medicaid Program (2010). Form CMS-416: Annual EPSDT Participation Report FFY2009. Salt Lake City, UT: Utah Department of Health.
- 6. Utah Immunization Program. (n.d.). *2010 program data* [Data file]. Salt Lake City, UT: Utah Department of Health.
- 7. Emergency Medical Services. (n.d.). 2009 program data [Data file]. Salt Lake City, UT: Utah Department of Health.
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Immunization Program, Maternal and Child Health Bureau

Division of Epidemiology and Laboratory Services

Utah Department of Health

PO Box 142001

Salt Lake City, Utah 84114-2001 Phone: (801) 538-9450 Fax: (801) 538-9440

Websites: www.immunize-utah.org

www.usiis.org

Utah Statewide Immunization Information System

Division of Epidemiology and Laboratory Services

Utah Department of Health Helpline: (801) 538-3440 (800) 678-3440

(000) 070 0440

Websites: www.immunize-utah.org

www.usiis.org

Data Resources Program, Maternal and Child Health Bureau

Division of Community and Family Health Services

Utah Department of Health

PO Box 142001

Salt Lake City, Utah 84114-2001 Phone: (801) 538-6916 Fax: (801) 538-6591

Website: www.health.utah.gov/drp

Child Adolescent School Health Program, Maternal and Child Health Bureau

Division of Community and Family Health Services

Utah Department of Health

PO Box 142001

Salt Lake City, Utah 84114-2001 Phone: (801) 538-9459 Fax: (801) 538-9409

Website: www.health.utah.gov/cash

Women, Infants, and Children Program, Maternal and Child Health Bureau

Division of Community and Family Health Services

Utah Department of Health

PO Box 141013

Salt Lake City, Utah 84114-1013 Phone: (801) 538-6620 Fax: (801) 538-6729

Website: www.health.utah.gov/wic

Other Resources Available

National Immunization Program

National Immunization Data and Statistics

Immunization Action Coalition

Healthy People 2010 Utah Department of Health

Utah Maternal and Child Health Bureau

Indicator-Based Information System for Public Health (IBIS-PH)

Office of Health Care Statistics

Utah Medicaid Program

www.cdc.gov/vaccines

www.cdc.gov/vaccines/stats-surv/default.htm

www.immunize.org www.healthypeople.gov www.health.utah.gov

www.health.utah.gov/cfhs/mch http://ibis.health.utah.gov www.health.utah.gov/hda www.health.utah.gov/medicaid