

Influenza Vaccination Coverage Report for Healthcare Workers in Utah Hospitals 2015-2016



Utah Department of Health
Division of Disease Control and Prevention
Bureau of Epidemiology

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Executive Summary

Influenza is a contagious respiratory illness caused by influenza viruses. Healthcare workers (HCWs) are especially at risk for exposure to influenza because they work directly with patients or handle material that could spread infection. The Advisory Committee on Immunization Practices (ACIP) and the Utah Department of Health (UDOH) strongly support the recommendation for annual influenza immunization of HCWs to reduce rates of healthcare-associated infections (HAIs). The ACIP also recommends that measures be taken to increase HCW immunization rates, and that those rates be used as a measure of the quality of a patient safety program.

Utah Administrative Rule 386-705¹ requires that hospitals report HCW influenza vaccination rates. The Utah Healthcare Infection Prevention Governance Committee* (UHIP GC) also recommends that all healthcare delivery facilities in Utah implement a policy of compulsory** annual influenza vaccination for all healthcare personnel, unless an organization has achieved a vaccination rate greater than 95 percent by other means.

The information in this report is collected from annual data reported by all licensed hospitals on the number of HCWs who were vaccinated for seasonal influenza. Data were collected from the National Healthcare Safety Network (NHSN) and the Utah Facility Online Reporting System (UFORS) and are complete at the time of report generation.

The report contains the following data:

- Self-reported data to the Utah Department of Health and to the National Healthcare Safety Network by each Utah facility that is required to report influenza vaccination for healthcare workers
- Identified facilities
- A comparison of data by influenza season
- A comparison of data by facility type
- A comparison of data by public health district

Influenza vaccination rates for HCWs in Utah licensed hospitals have increased consistently from 75.5 percent for the 2008-2009 influenza season to 95.7 percent for the 2015-2016 influenza season.

The UDOH and UHIP GC recognize that influenza vaccination of healthcare personnel is a critical patient safety practice and agree that compulsory influenza vaccination for HCWs should be implemented and maintained in all healthcare facilities. The UDOH will continue to encourage all healthcare facilities to achieve influenza vaccination rates for HCWs of 95 percent or greater.

*The Utah Healthcare Infection Prevention Governance Committee is a multi-disciplinary panel of state leaders in patient safety, infectious diseases, and infection control. Membership is comprised from a broad base of care delivery groups across the state and organized under and staffed by the Utah Department of Health.

**Employer requirement for influenza vaccination.

Key Findings

This report was developed by the UDOH in collaboration with the UHIP GC. The information in this report is collected from annual data reported by all licensed hospitals on the number of HCWs that were vaccinated for seasonal influenza.^{2, 3} Data were collected from the National Healthcare Safety Network (NHSN) and the Utah Facility Online Reporting System (UFORS). Hospital and state-specific influenza vaccination rates were determined by collecting data on the number of HCWs at each licensed hospital in Utah and the number of HCWs who were vaccinated for seasonal influenza. Vaccination rates were calculated by dividing the number of HCWs vaccinated by the total number of HCWs.

Below is a summary of 2015-2016 influenza vaccination data reported by Utah hospitals.

Table 1. Influenza vaccination coverage among healthcare workers, Utah, 2015-2016

Hospitals reporting	Statewide HCW vaccination coverage	Range of HCW vaccination coverage by public health district	Range of HCW vaccination coverage by hospital
100%	95.7%	77.1% - 98.8%	37.5% - 100%

Table 2. Compulsory influenza vaccination policies among hospitals, Utah, 2015-2016

The UDOH does not *require* Utah hospitals to have compulsory influenza vaccination policies for HCWs; however, some Utah healthcare facilities have such policies in place. Facilities implementing compulsory influenza vaccination policies for employees had higher influenza vaccination rates than those that did not.

	Hospitals with compulsory vaccination policies	Hospitals without or with unknown compulsory vaccination policies	Total number of hospitals
Hospitals with $\geq 90\%$ coverage	51 (91.1%)	3 (30%)	54
Hospitals with $< 90\%$ coverage	5 (8.9%)	7 (70%)	12
TOTAL	56	10	66

Recommendation

The UDOH and the UHIP GC continue to recommend that all healthcare delivery facilities in Utah implement a policy of compulsory annual influenza vaccination for all healthcare personnel, unless an organization has achieved a vaccination rate greater than 95 percent by other means.

Notations

Throughout this report, the following notations are used to describe the comparison data in tables 3-15 for each public health district.

Licensed Hospitals**

Utah licensed hospitals include: acute care, long-term acute care, critical access, rehabilitation, psychiatric, children's, and government hospitals.

Number of HCWs¹

Total number of healthcare workers employed in the licensed hospital.

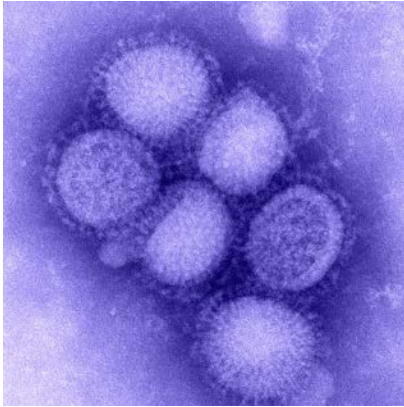
Vaccinated HCWs²

Total number of healthcare workers employed in the licensed hospital who received the influenza vaccine during the 2015-2016 influenza season.

Vaccination percentage³

Vaccination coverage levels of healthcare workers who received influenza vaccine during 2015-2016 influenza season.

Introduction



Influenza is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness and can result in hospitalization or death. Some people, such as older people, young children, and people with certain health conditions, are at high risk for serious influenza complications. The best way to prevent influenza is by getting vaccinated each year.

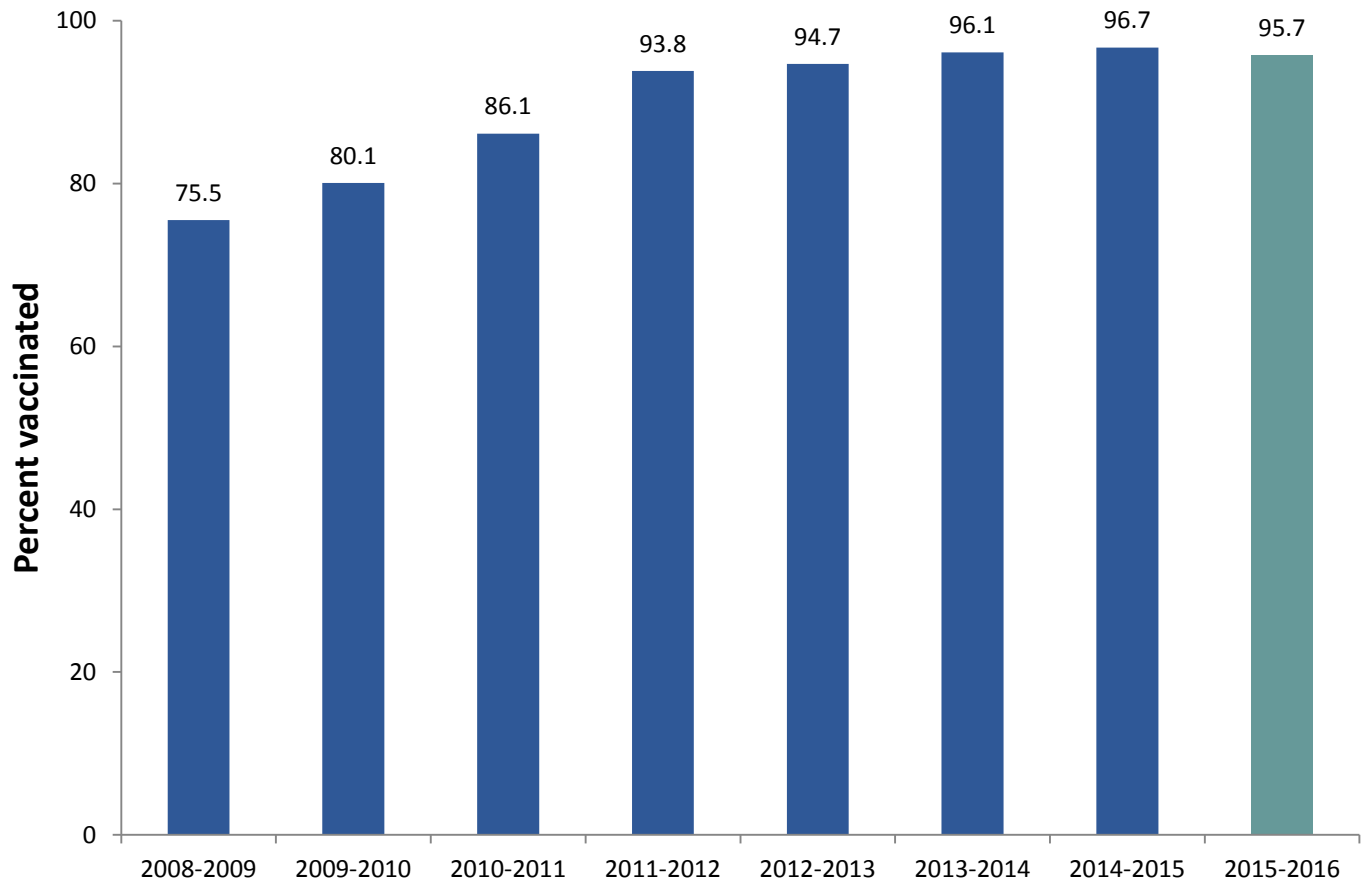
Influenza is also one of the leading causes of employee absences, causing millions of lost workdays and lost wages. Some estimates suggest that 10 to 12 percent of all employee absences are due to employees contracting the influenza virus. Each infected employee might miss up to six days of work and need up to two weeks to make a full recovery. Additional considerations include costs related to lowered productivity when ill employees are at work, slowed projects, or wages and training needed for temporary workers. Many employees also miss work to care for ill family members. The more children get sick, the greater the likelihood that employees will miss work or unknowingly become a carrier of the virus, spreading it at the workplace. The end result is that seasonal influenza is a costly disease to patients, employers, and society in terms of direct and indirect medical costs and lost productivity.³

Healthcare workers (HCWs) are especially at risk for exposure to influenza because they work directly with patients or handle material that could spread infection. Annual influenza vaccination for HCWs is recommended by several national organizations, such as the Centers for Disease Control and Prevention (CDC), Infectious Disease Society of America (ISDA), American Academy of Pediatrics (AAP), American Hospital Association (AHA), and the Association for Professionals in Infection Control and Epidemiology (APIC), to reduce the likelihood HCWs will get or spread influenza. Many of these same organizations support *mandatory* influenza vaccination policies for HCWs. HCWs can protect themselves, their patients, and family members by getting vaccinated. Vaccination of HCWs can specifically benefit patients who cannot receive vaccination (i.e., infants aged <6 months or those with severe allergic reactions to prior influenza vaccination), patients who respond poorly to vaccination (i.e., persons aged >85 years and immune-compromised persons), and persons for whom antiviral treatment is not available (i.e., persons with medical contraindications).⁵

Influenza vaccination of healthcare personnel is a critical patient safety practice that should be required in all healthcare facilities. Clinical evidence clearly shows that HCW influenza vaccination reduces patient infections and deaths. Healthcare facilities that have adopted such policies have shown dramatic improvements in HCW vaccination rates.⁶ The UDOH and the UHIP GC continue to support the opinion that patients should reasonably be able to expect they will not contract potentially life-threatening illnesses, such as influenza, from their healthcare providers while being treated for other conditions.

Influenza Vaccination Coverage by Influenza Season

Figure 1. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by influenza season, Utah, 2008-2016 *



***NOTE:** In previous reports, influenza vaccination coverage rates for healthcare workers in licensed hospitals from 2008-2009 through 2011-2012 were reported as an average vaccination percentage across all Utah hospitals, rather than as an overall state percentage. This graph reflects the adjusted percentages with influenza seasons from 2008-2009 through 2015-2016 reported as an overall state percentage.

Influenza Vaccination Coverage by Facility Type

Table 3. Influenza vaccination coverage for healthcare workers in licensed hospitals* by facility type, Utah, 2015-2016 influenza season

	Number of hospitals	Average HCW vaccination percentage	Range of vaccination percentages
Acute care hospitals	35	96.7%	77.1% - 100%
Children's hospitals	2	99.1%	98.9% - 99.2%
Chemical dependency hospitals	1	37.5%	37.5% - 37.5%
Critical access hospitals	11	95.4%	72.2% - 100%
Government hospitals	1	60.2%	60.2% - 60.2%
Long-term acute care hospitals	4	97.3%	91.9% - 100%
Psychiatric hospitals	10	84.8%	52.5% - 99.5%
Rehabilitation hospitals	2	96.1%	93.2% - 99.1%

*Utah licensed hospitals include: acute care, long-term acute care, critical access, rehabilitation, psychiatric, children's, and government hospitals.

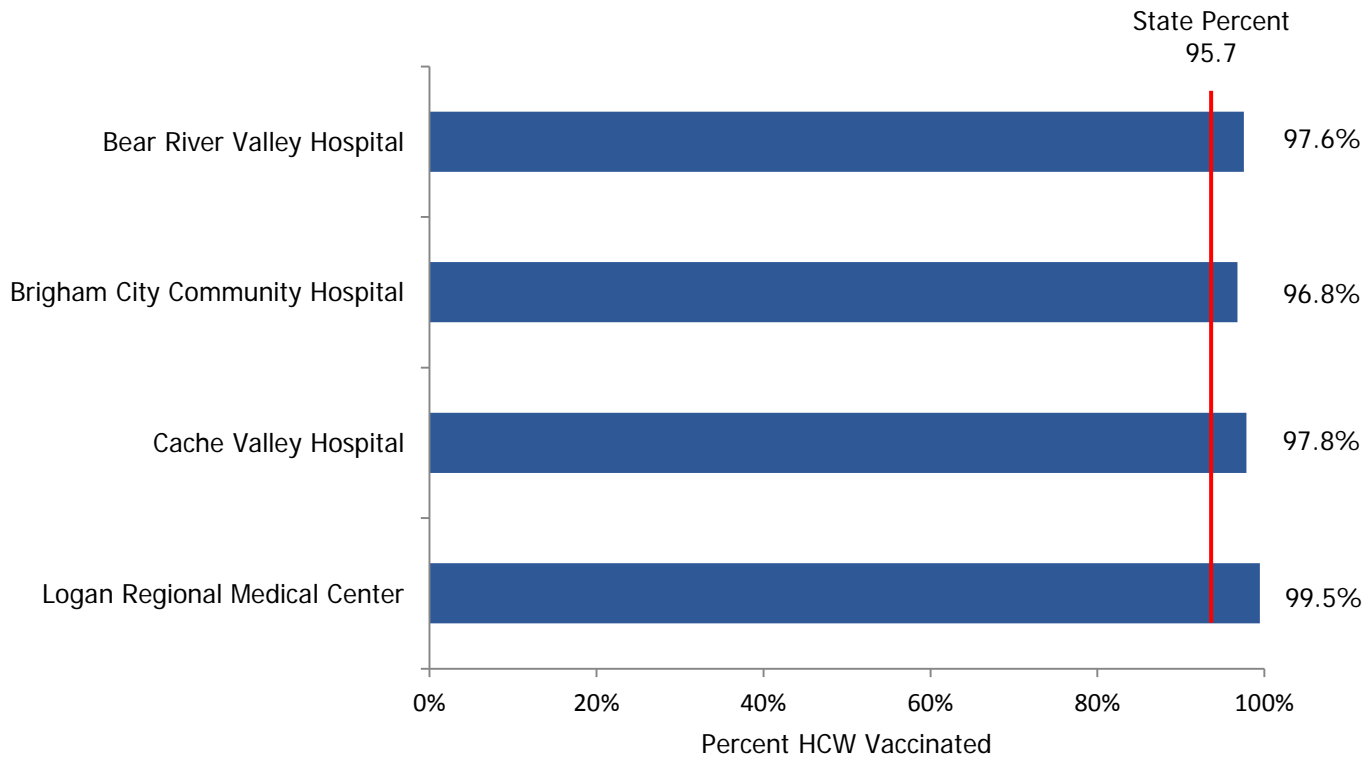
Bear River Health District*



Table 4. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Bear River, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	1,764	1,731	98.7%	
Bear River Valley Hospital	123	120	97.6%	Yes
Brigham City Community Hospital	216	209	96.8%	Yes
Cache Valley Specialty Hospital	334	317	97.8%	Yes
Logan Regional Medical Center	1,091	1,085	99.5%	Yes

Figure 2. Influenza vaccination rates for healthcare workers by licensed hospital, Bear River Health District, 2015-2016 influenza season



*Box Elder, Cache and Rich Counties

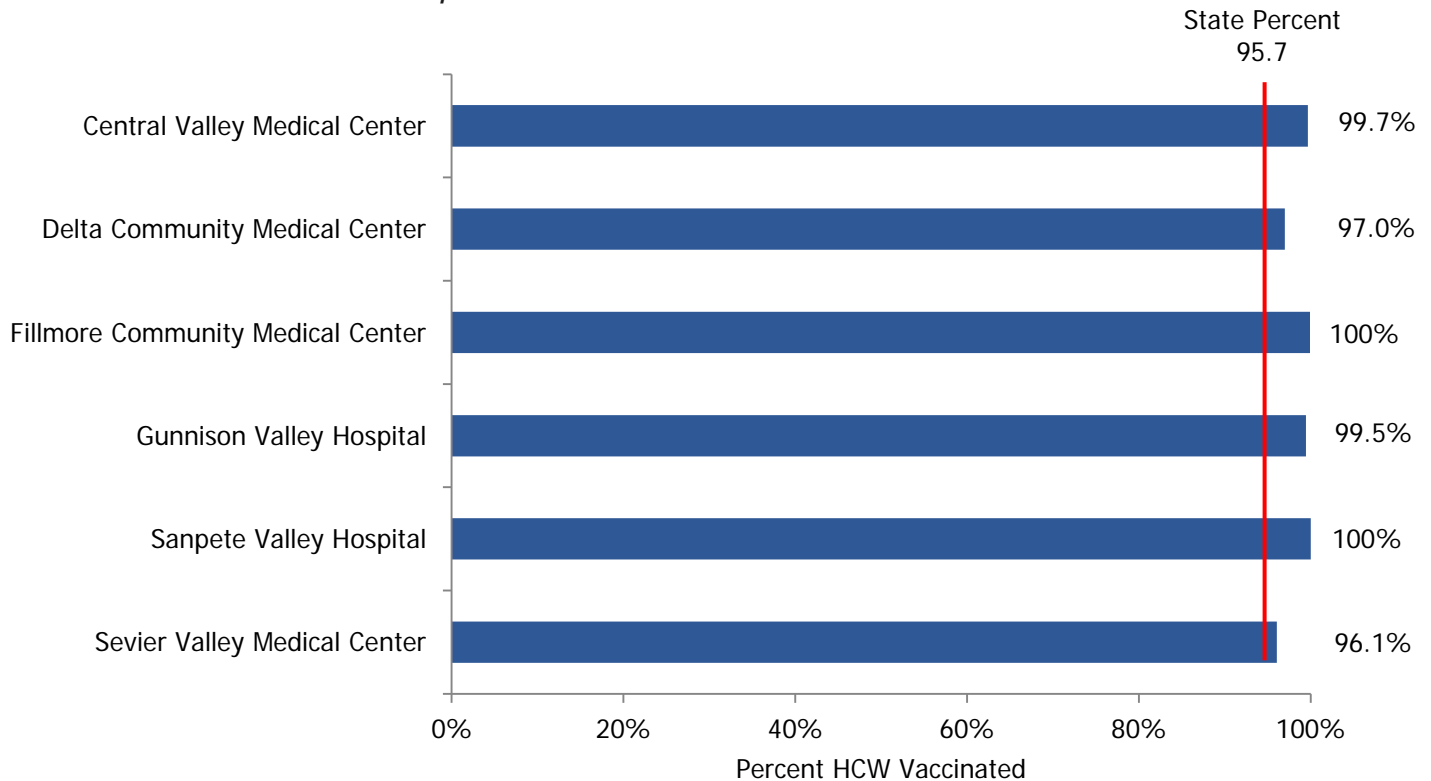
Central Utah Health District*



Table 5. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Central Utah, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	924	913	98.8%	
Central Valley Medical Center	305	304	99.7%	Yes
Delta Community Medical Center	67	65	97.0%	Yes
Fillmore Community Medical Center	62	62	100.0%	Yes
Gunnison Valley Hospital	186	185	99.5%	Yes
Sanpete Valley Medical Center	126	126	100.0%	Yes
Sevier Valley Medical Center	178	171	96.1%	Yes

Figure 3. Influenza vaccination rates for healthcare workers by licensed hospital, Central Utah Health District, 2015-2016 influenza season



*Juab, Millard, Sanpete, Sevier, Piute, and Wayne Counties

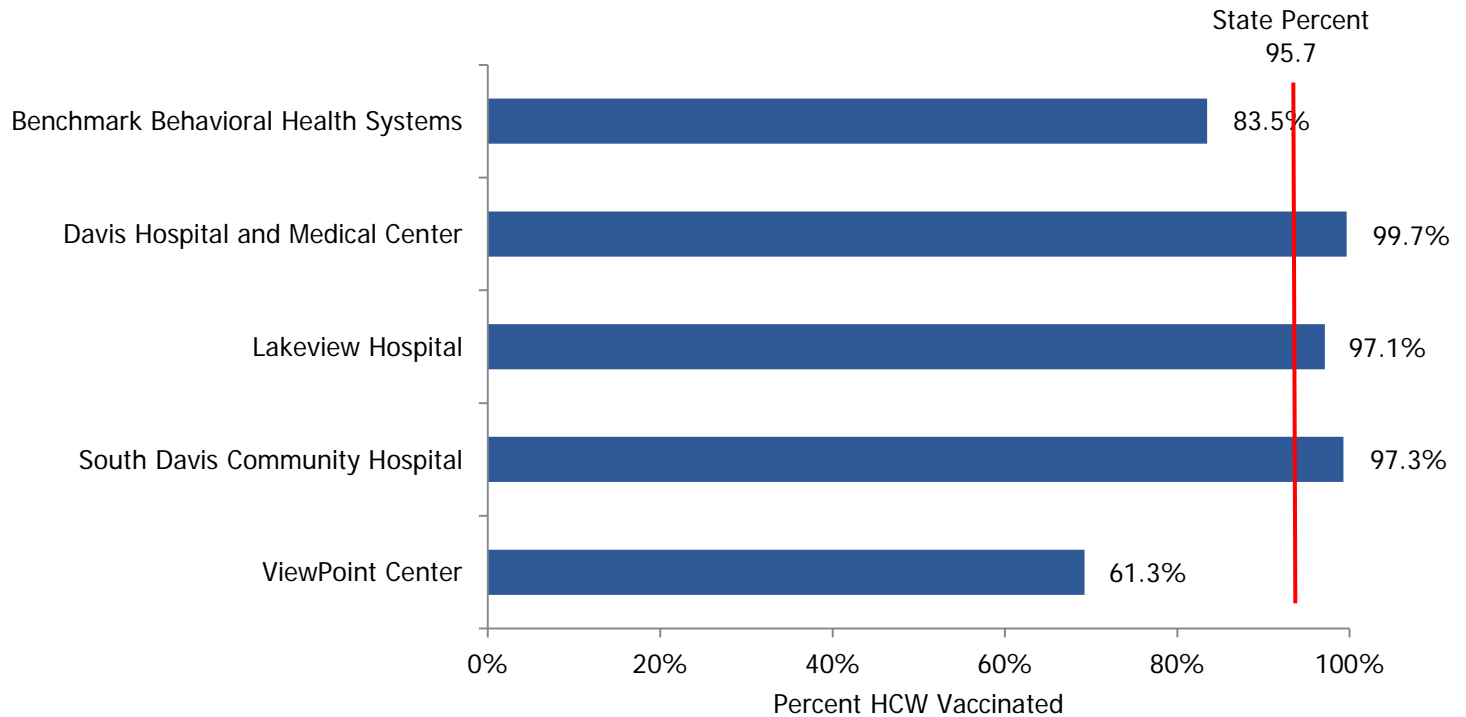
Davis County Health District*



Table 6. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Davis County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	2,174	2,105	96.9%	
Benchmark Behavioral Health Systems	139	116	83.5%	No
Davis Hospital and Medical Center	886	883	99.7%	Yes
Lakeview Hospital	521	506	97.1%	Yes
South Davis Community Hospital	597	581	97.3%	Yes
View Point Center	31	19	61.3%	No

Figure 4. Influenza vaccination rates for healthcare workers by licensed hospital, Davis County Health District, 2015-2016 influenza season



*Davis County

Salt Lake County Health District*



Table 7. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Salt Lake County, 2015-2016 influenza season

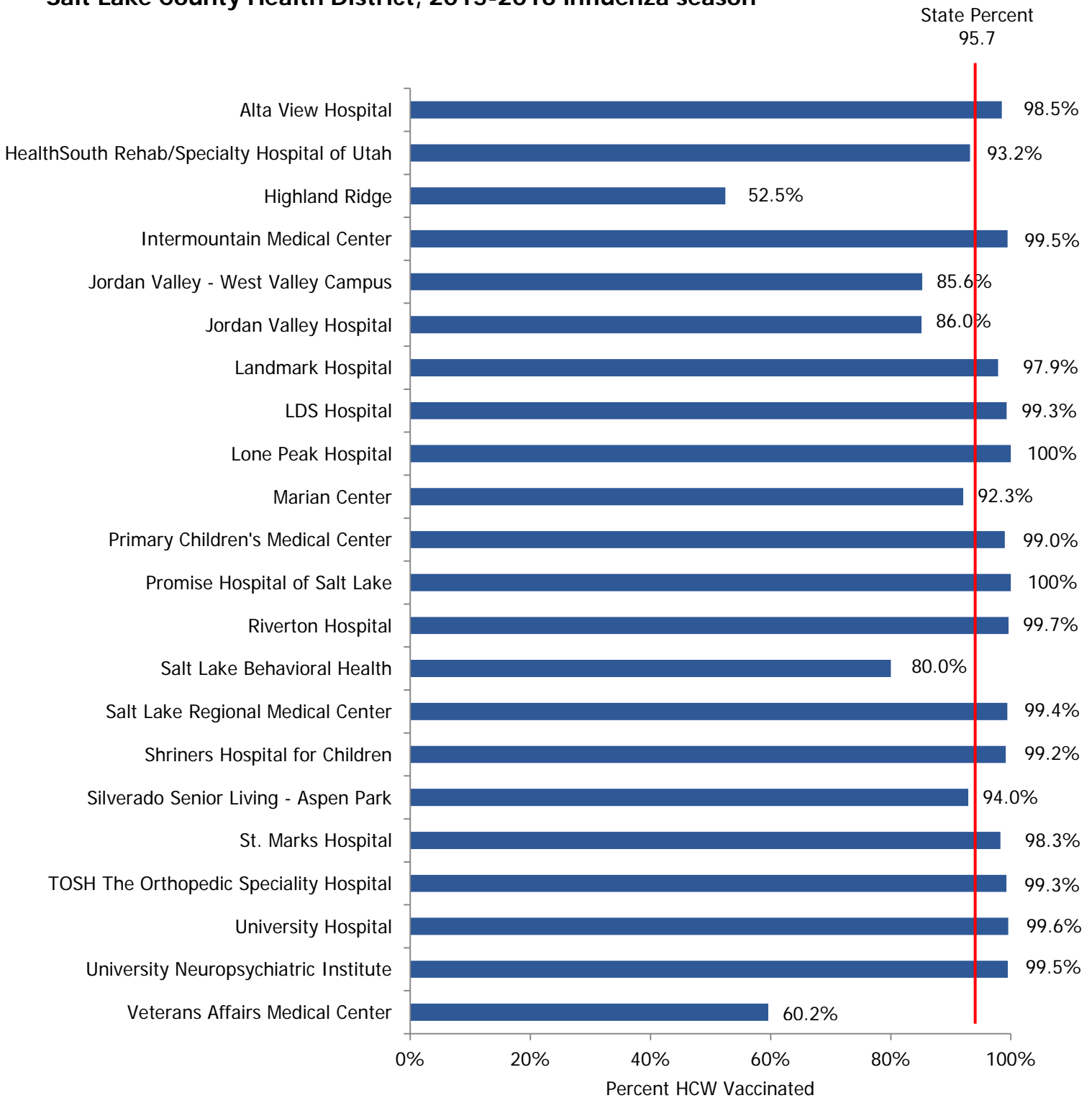
	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	29,158	27,638	93.9%	
Alta View Hospital	526	518	98.5%	Yes
HealthSouth Rehabilitation/ Specialty Hospital of Utah	206	192	93.2%	No
Highland Ridge Hospital	122	64	52.5%	No
Intermountain Medical Center	4,841	4,815	99.5%	Yes
Jordan Valley Medical Center	779	670	86.0%	Yes
Jordan Valley – West Valley Campus	404	346	85.6%	Yes
Landmark Hospital of Salt Lake	95	93	97.9%	Yes
LDS Hospital	1,398	1,388	99.3%	Yes
Lone Peak Hospital	210	210	100.0%	Yes
Marian Center	26	24	92.3%	Yes
Primary Children’s Medical Center	3,197	3,164	99.0%	Yes
Promise Hospital of Salt Lake	187	187	100.0%	Yes
Riverton Hospital	594	592	99.7%	Yes
Salt Lake Behavioral Health	205	164	80.0%	No
Salt Lake Regional Medical Center	859	854	99.4%	Yes
Shriners Hospital for Children	235	233	99.2%	Yes
Silverado Senior Living - Aspen Park	150	141	94.0%	Yes
St. Mark’s Hospital	1,543	1,516	98.3%	Yes
The Orthopedic Specialty Hospital (TOSH)	401	398	99.3%	Yes
University Hospital [†]	9,702	9,659	99.6%	Yes
University Neuropsychiatric Institute	806	802	99.5%	Yes
Veterans Affairs Medical Center	2,672	1,608	60.2%	No

*Salt Lake County

[†]Includes Huntsman Cancer Hospital

Salt Lake County Health District

Figure 5. Influenza vaccination rates for healthcare workers by licensed hospital, Salt Lake County Health District, 2015-2016 influenza season



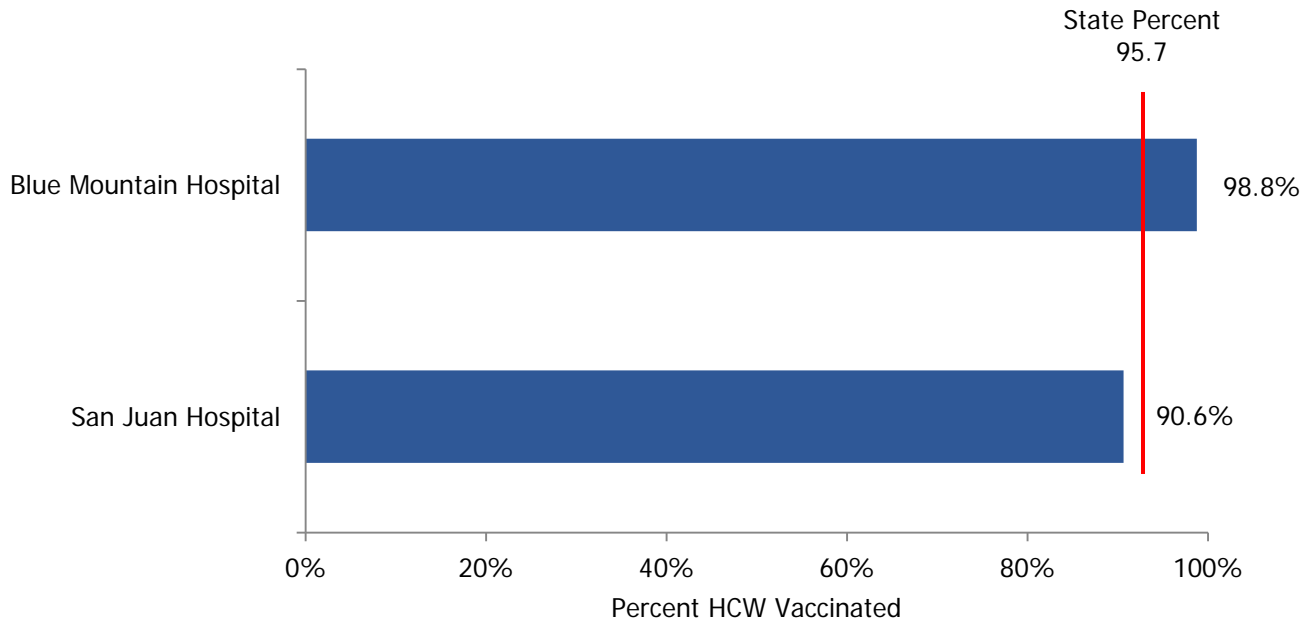
San Juan County Health District*



Table 8. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, San Juan County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	47,783	46,183	96.7%	
Licensed hospitals**	144	137	95.1%	
Blue Mountain Hospital	80	79	98.8%	Yes
San Juan Hospital	64	58	90.6%	No

Figure 6. Influenza vaccination rates for healthcare workers by licensed hospital, San Juan County Health District, 2015-2016 influenza season



*San Juan County

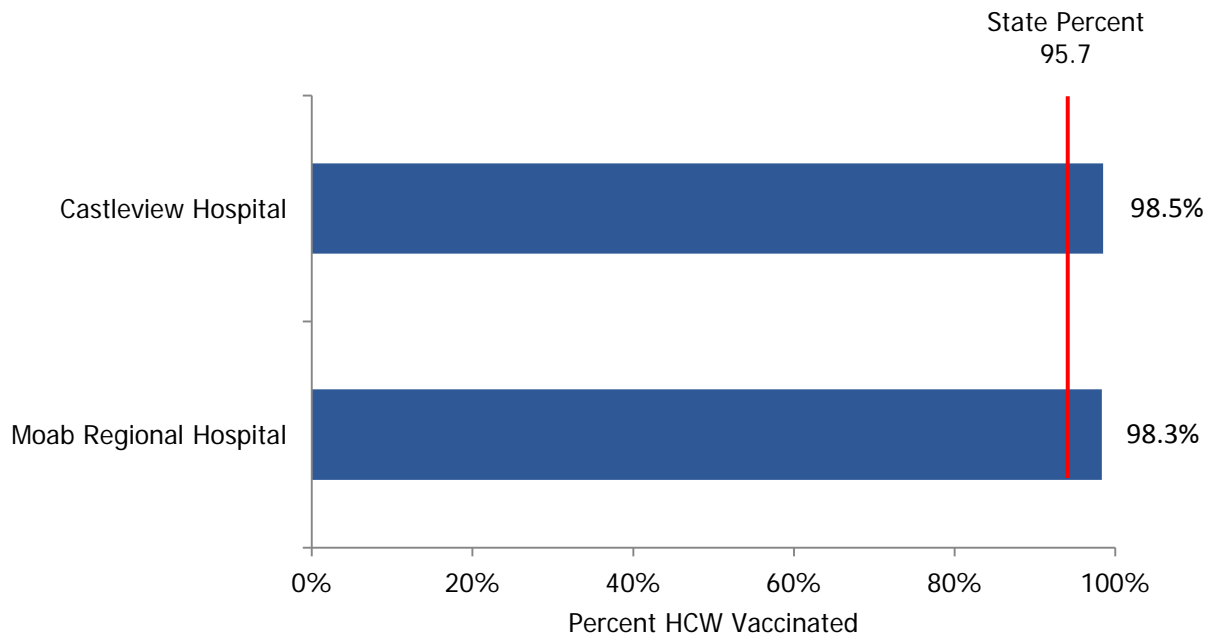
Southeastern Utah Health District *



Table 9. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Southeastern Utah, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	573	564	98.4%	
Castleview Hospital	396	390	98.5%	Yes
Moab Regional Hospital	177	174	98.3%	Yes

Figure 7. Influenza vaccination rates for healthcare workers by licensed hospital, Southeastern Utah Health District, 2015-2016 influenza season



*Carbon, Emery, and Grand Counties

Southwest Utah Health District*

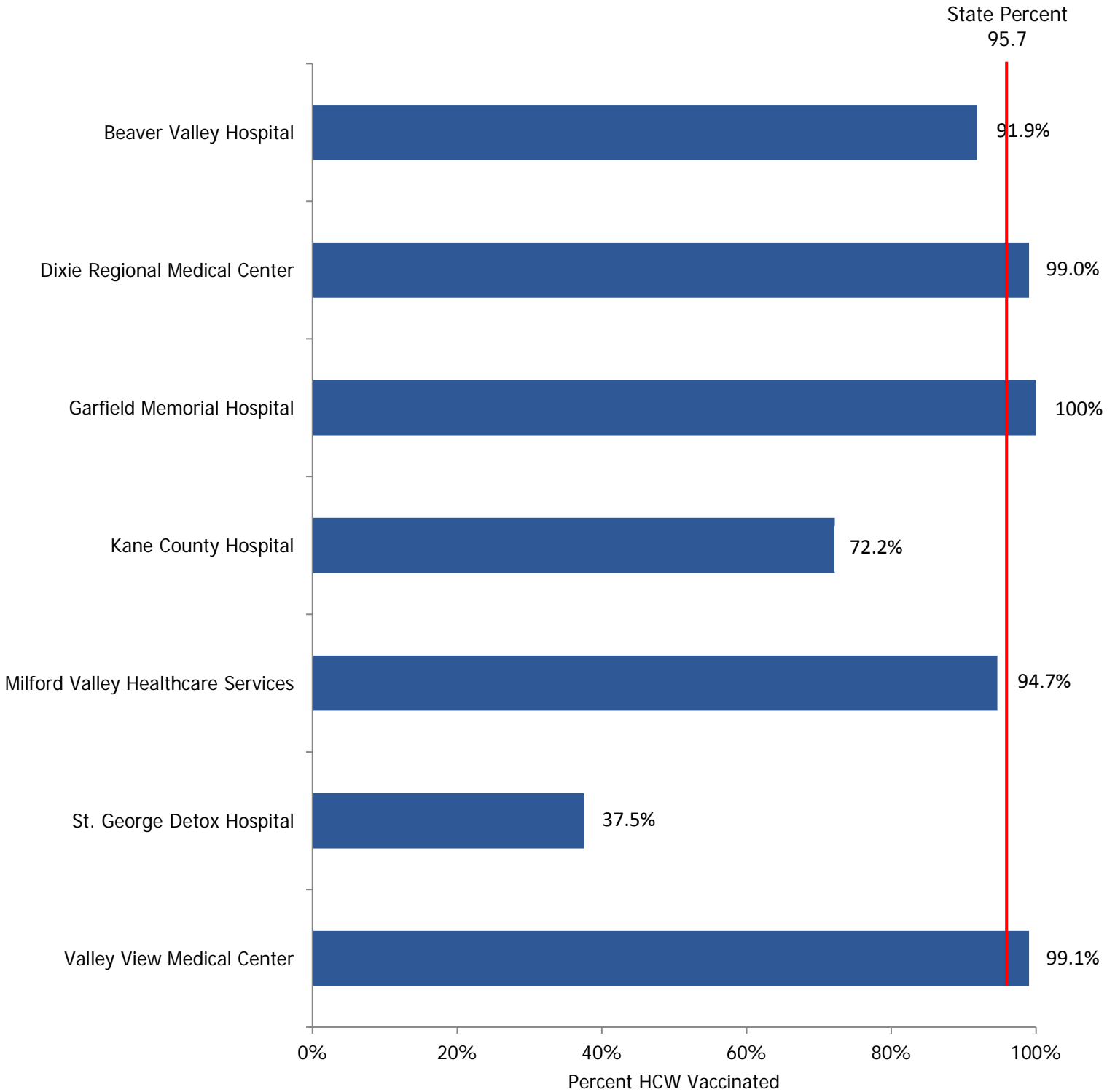


Table 10. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Southwest Utah, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	3,289	3,201	97.3%	
Beaver Valley Hospital	123	113	91.9%	Unknown
Dixie Regional Medical Center	2,388	2,365	99.0%	Yes
Garfield Memorial Hospital	118	118	100.0%	Yes
Kane County Hospital	151	109	72.2%	Yes
Milford Valley Healthcare Services	75	71	94.7%	Yes
St. George Detox Hospital	8	3	37.5%	Yes
Valley View Medical Center	426	422	99.1%	Yes

*Beaver, Garfield, Iron, Kane, and Washington Counties

Figure 8. Influenza vaccination rates for healthcare workers by licensed hospital, Southwest Utah Health District, 2015-2016 influenza season



Summit County Health District *

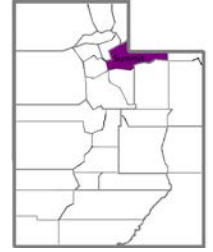
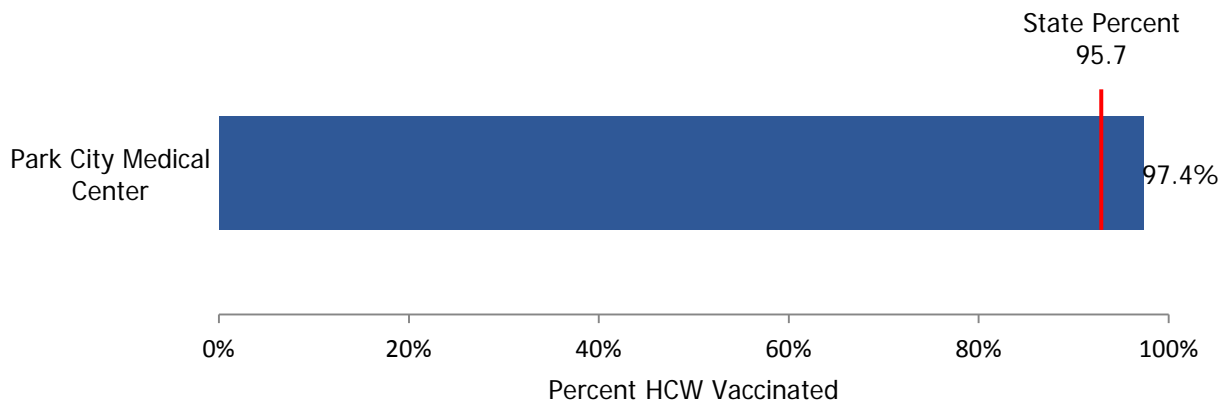


Table 11. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Summit County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	452	441	97.4%	
Park City Medical Center	452	441	97.4%	Yes

Figure 9. Influenza vaccination rates for healthcare workers by licensed hospital, Summit County Health District, 2015-2016 influenza season



*Summit County

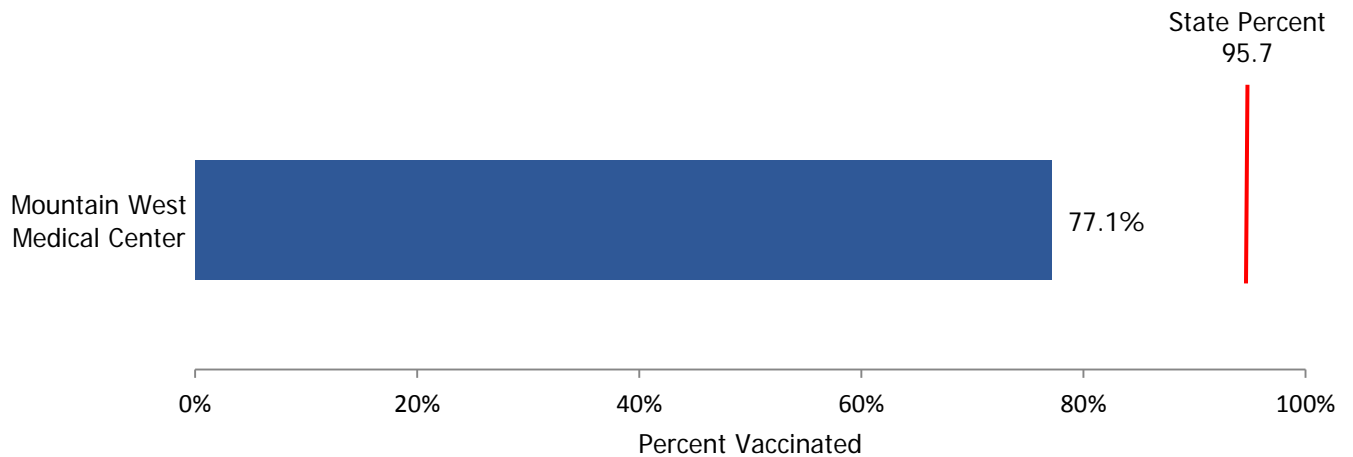
Tooele County Health District*



Table 12. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Tooele County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	376	290	77.1%	
Mountain West Medical Center	376	290	77.1%	No

Figure 10. Influenza vaccination rates for healthcare workers by licensed hospital, Tooele County Health District, 2015-2016 influenza season



*Tooele County

TriCounty Health District*

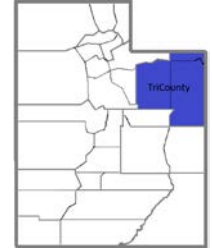
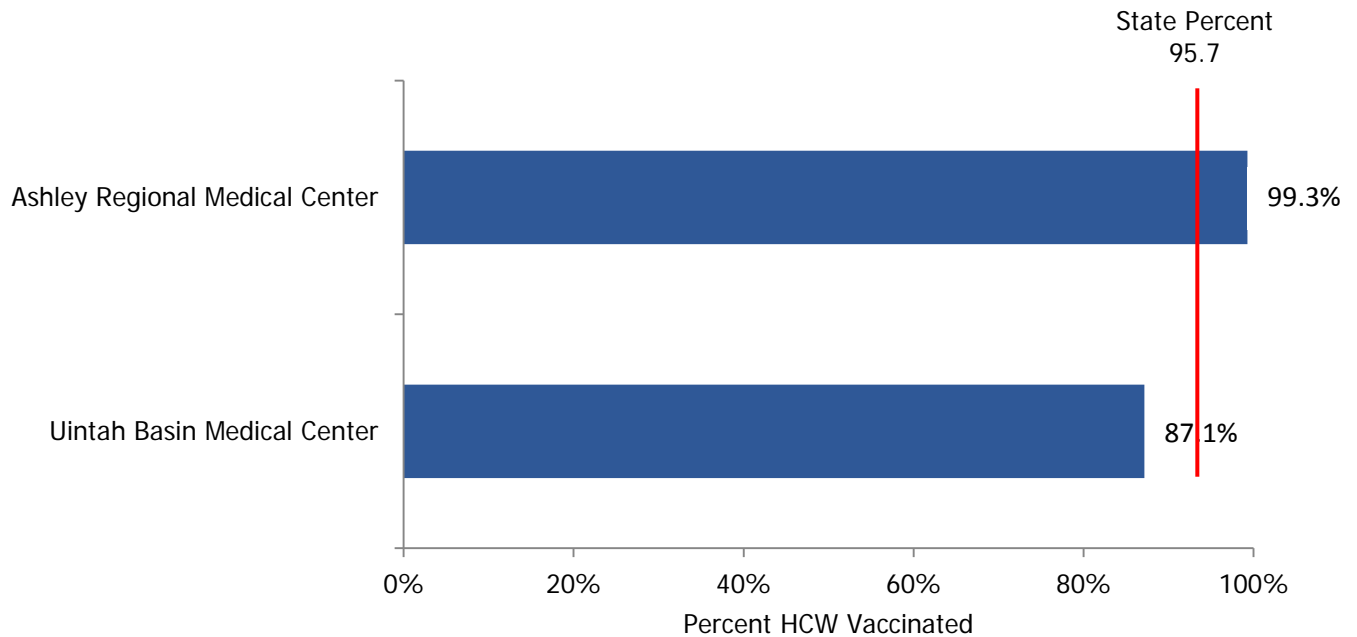


Table 13. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, TriCounty, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	1,015	917	90.3%	
Ashley Regional Medical Center	269	267	99.3%	Yes
Uintah Basin Medical Center	746	650	87.1%	Yes

Figure 11. Influenza vaccination rates for healthcare workers by licensed hospital, TriCounty Health District, 2015-2016 influenza season



*Daggett, Duchesne, and Uintah Counties

Utah County Health District *

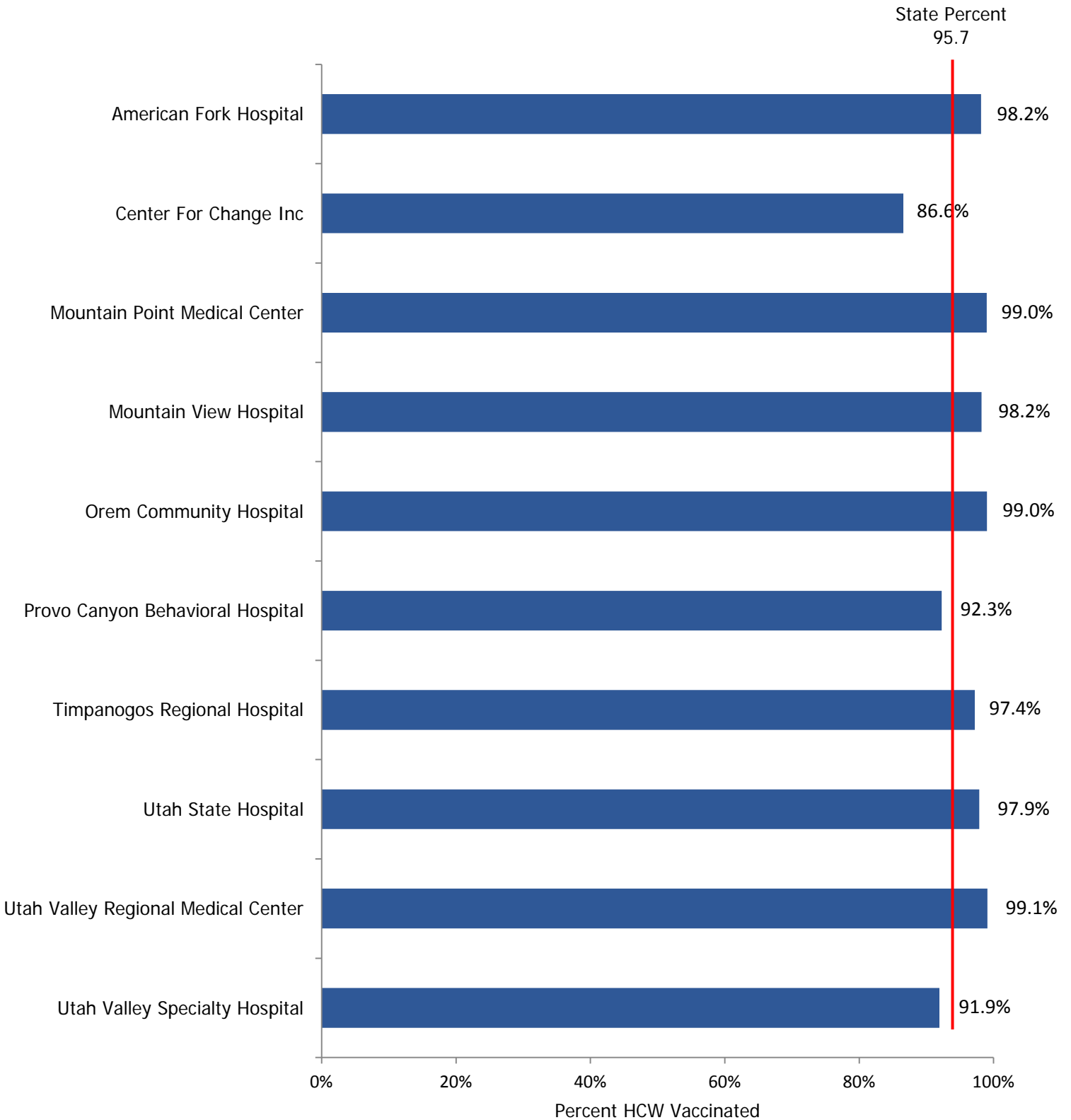


Table 14. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Utah County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	6,750	6,604	97.8%	
American Fork Hospital	756	742	98.2%	Yes
Center for Change, Inc.	201	174	86.6%	No
Mountain Point Medical Center	290	287	99.0%	Unknown
Mountain View Hospital	392	385	98.2%	Yes
Orem Community Hospital	205	203	99.0%	Yes
Provo Canyon Behavioral Hospital	181	167	92.3%	No
Timpanogos Regional Hospital	644	627	97.4%	Yes
Utah State Hospital	789	772	97.9%	Yes
Utah Valley Regional Medical Center	3,094	3,065	99.1%	Yes
Utah Valley Specialty Hospital	198	182	91.9%	Yes

*Utah County

Figure 12. Influenza vaccination rates for healthcare workers by licensed hospital, Utah County Health District, 2015-2016 influenza season



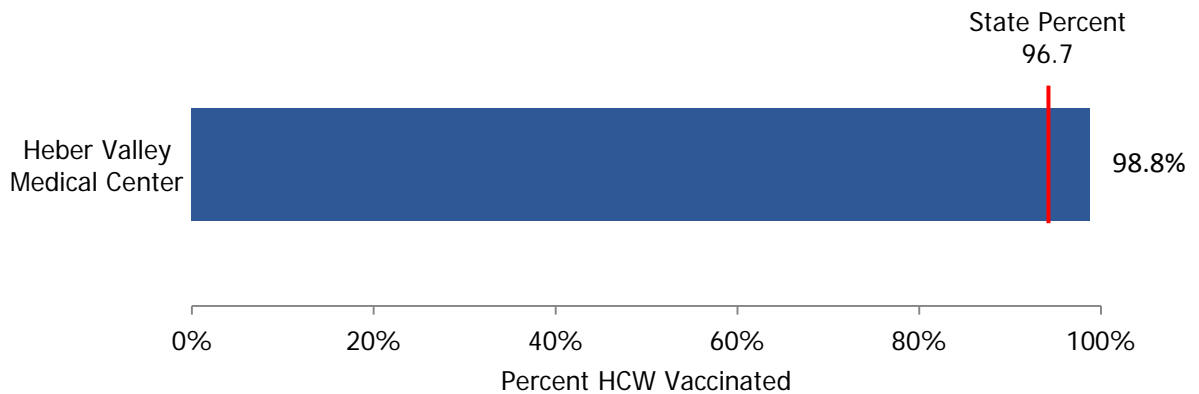
Wasatch County Health District*



Table 15. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Wasatch County, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	168	166	98.8%	
Heber Valley Medical Center	168	166	98.8%	Yes

Figure 13. Influenza vaccination rates for healthcare workers by licensed hospital, Wasatch County Health District, 2015-2016 influenza season



*Wasatch County

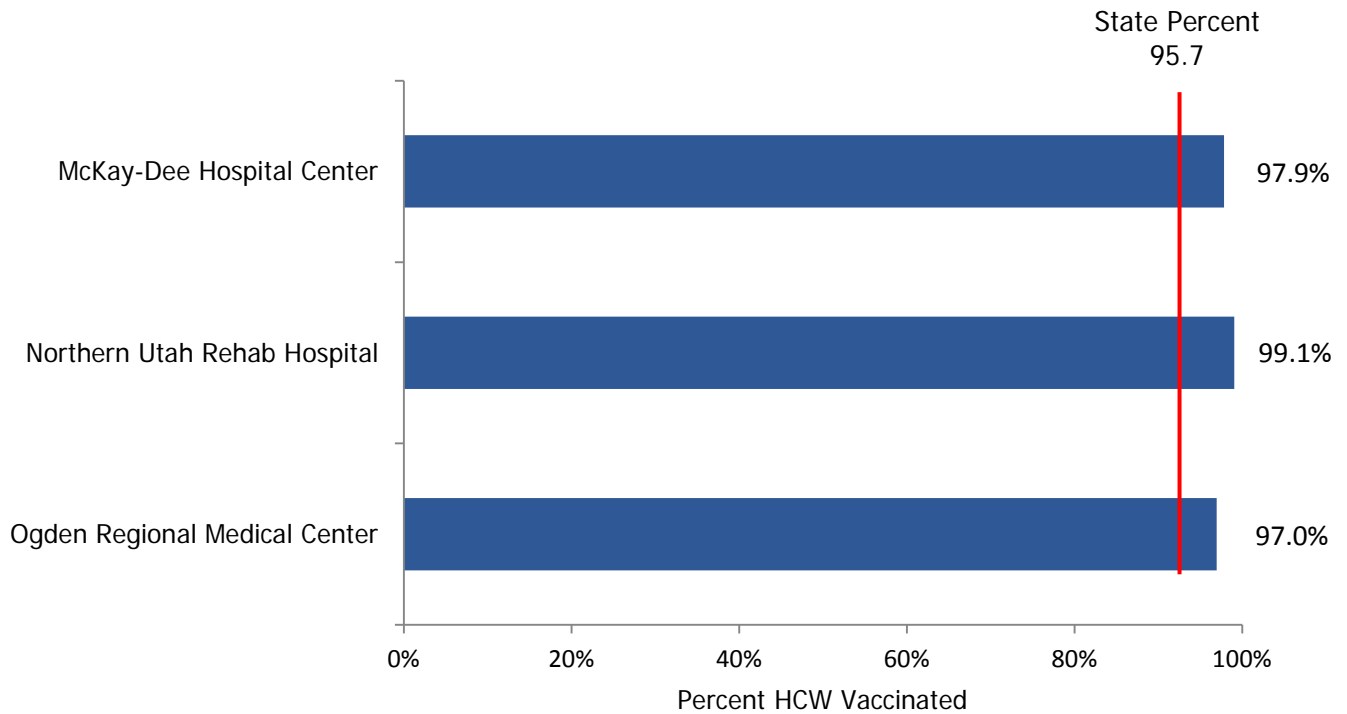
Weber Morgan Health District*



Table 16. Influenza vaccination coverage rates for healthcare workers in licensed hospitals by public health district, Weber-Morgan, 2015-2016 influenza season

	Number of HCWs ¹	Vaccinated HCWs ²	Vaccination percentage ³	Compulsory vaccination
State of Utah coverage	50,169	48,023	95.7%	
Licensed hospitals**	3,841	3,751	98.8%	
McKay-Dee Hospital Center	2,738	2,679	97.9%	Yes
Northern Utah Rehabilitation Hospital	108	107	99.1%	Unknown
Ogden Regional Medical Center	995	965	97.0%	Yes

Figure 14. Influenza vaccination rates for healthcare workers by licensed hospital, Weber-Morgan Health District, 2015-2016 influenza season



*Weber and Morgan Counties

The following are definitions used in this report.

- 1. The Advisory Committee on Immunization Practices** - A group of medical and public health experts that develops recommendations on how to use vaccines to control diseases in the United States. The recommendations stand as public health advice that will lead to a reduction in the incidence of vaccine preventable diseases and an increase in the safe use of vaccines and related biological products.
- 2. Healthcare worker** - Any person employed by a healthcare facility and who, in the usual course of work, either enters patient rooms or provides direct patient care. Healthcare workers may include personnel such as physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, or dietary, housekeeping, and maintenance personnel.
- 3. Healthcare-associated infections** - An infection that develops in a resident who is cared for in any setting where healthcare is delivered (i.e., acute care hospital, skilled nursing facility, dialysis center, etc.) that was not developing or present at the time of admission to that setting.
- 4. Hospital facility types:**
 - Acute care** - A facility that provides diagnostic, therapeutic, and rehabilitative services to both inpatients and outpatients by or under the supervision of physicians.
 - Long-term acute care (LTAC)** - A hospital that provides on-site all basic services required of a general hospital that are needed for the diagnosis, therapy, and treatment offered or required by all patients admitted to the hospital, including pharmacy, laboratory, nursing services, occupational, physical, respiratory and speech therapies, dietary, social services, and specialized diagnosis and therapeutic services.
 - Children's hospitals** - For purposes of this report, a children's hospital refers to Primary Children's Medical Center and Shriners Hospital for Children in Salt Lake City, Utah.
 - Critical access** - A nonprofit, profit, or public hospital that is enrolled as a Medicaid provider and qualifies as a Critical Access Hospital under 42, Code of Federal Regulations, Section 485, Subpart F - Conditions of Participation Critical Access Hospitals. Visit <http://www.CMS.gov> for more information.
 - Government** - For purposes of this report, a government hospital refers to the Veterans Affairs Salt Lake City Health Care System in Salt Lake City, Utah.
 - Specialty hospital** - A facility that provides specialized diagnostic, therapeutic, or rehabilitative services in the recognized specialty or specialties for which the hospital is licensed including, but not limited to, psychiatric and rehabilitation hospitals.

1. Utah Rule 386-705, Epidemiology, Healthcare Associated Infections. Available at <http://www.rules.utah.gov/publicat/code/r386/r386-705.htm>.
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**Utah Department of Health
Healthcare-Associated Infections
Prevention & Reporting Program**

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