UTAH DEPARTMENT OF HEALTH

Utah Health Status Update:

Influenza Vaccination in Utah and a New Universal Vaccination Recommendation

September 2010

Annual influenza vaccination is the most effective means for preventing influenza illness and associated complications. During the 2009–2010 influenza season, state and local public health officials, together with clinical partners, initiated an aggressive influenza vaccination campaign to encourage the public to be vaccinated.

The 2009–2010 influenza season had unique challenges. The seasonal influenza vaccine for 2009–2010 was already in production when pandemic H1N1 influenza emerged. To provide protection from this virus, a separate, additional vaccine with the pandemic strain was developed. This required two separate influenza vaccination campaigns, including separate ordering, delivery, administration, and tracking of vaccine. Due to observed differences in the populations impacted by seasonal influenza and pandemic H1N1 influenza, priority groups for vaccination for the two vaccines differed. This required careful messaging to the public, especially in the case of the pandemic H1N1 influenza vaccine, where non-traditional consumers of influenza vaccines, such as healthy young adults, were among the high risk individuals for severe illness.

- **Annual influenza vaccination is the most effective means for preventing influenza illness and associated complications.**
- **Despite logistical challenges, Utah's 2009–2010 influenza vaccination campaigns were successful, meeting or exceeding national immunization rates and Utah rates for previous influenza seasons.**
- **Vaccination rates for Utah's hospital healthcare workers exceed national averages, however, rates for Long Term Care Facility workers were much lower than national averages for 2009–2010 and slightly lower than national averages for previous seasons.**
- **The new recommendation is intended to remove barriers to influenza vaccination by delivering a simple and clear message to emphasize the importance of influenza vaccination across the lifespan.**

Pandemic vs. Seasonal Vaccination

Table 1. Pandemic H1N1 and seasonal influenza vaccination rates, Utah, 2009–2010

	Population	Percent Vaccinated
Pandemic H1N1 Vaccine	UT-Overall (6 mos+)	29%
	U.S.-Overall (6 mos+)	24%
	UT-Adults (18 yrs+)	24%
	U.S.-Adults (18 yrs+)	20%
Seasonal Vaccine	UT-Adults (18 yrs+)	41%
	U.S.-Adults (18 yrs+)	40%

Influenza Vaccination Trends

Figure 2. Seasonal influenza vaccination rates, Utah, 2005–2010

	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010
Adults (18 yrs+)	30%	33%	39%	39%	40%
Hospital HCW	N/A	N/A	N/A	72%	79%
LTCF HCW	46%	48%	48%	47%	49%

Influenza Vaccination Rates in Utah

Despite logistical challenges, Utah's 2009–2010 influenza vaccination campaigns were successful, meeting or exceeding national immunization rates and Utah rates for previous influenza seasons. As of February 2010, nearly 29% of Utahns six months of age and older and 24% of Utahns 18 years of age and older were vaccinated for pandemic H1N1 influenza. Forty-one percent of Utahns 18 years of age and older were vaccinated for seasonal influenza. In comparison, as of January 2010, nationally, 24% of persons six months of age or older and 20% of persons 18 years of age and older were vaccinated for pandemic H1N1 influenza[1]. Nationally, forty percent of persons 18 years of age and older were vaccinated for seasonal influenza[2]. In recent years, approximately 30–40% of Utahns 18 years of age and older have received an annual influenza immunization. Table 1 shows overall pandemic H1N1 and seasonal influenza vaccination rates and vaccination rates for the 2009–2010 influenza season; and Table 2 compares seasonal vaccination rates for influenza seasons 2005–2006 through 2009–2010.

Since 1986, the Advisory Committee on Immunization Practices (ACIP) has recommended that all healthcare workers receive annual influenza vaccinations. The Utah Department of Health (UDOH) has been tracking vaccination rates for healthcare workers in Long Term Care Facilities in Utah since 2003 and in hospital healthcare workers since 2008. During the 2009–2010 influenza season, 49% of Long Term Care Facility workers were vaccinated for seasonal influenza, similar to recent previous

influenza seasons (46–48%). Vaccination rates among hospital healthcare workers in Utah are substantially higher: 60% for pandemic H1N1 influenza in 2009–2010, and 79% for seasonal influenza in 2009–2010, compared to 72% in 2008–2009. Nationally, as of January 2010, vaccination rates among healthcare workers were 37% for pandemic H1N1 influenza and 62% for seasonal influenza, substantially higher than typical seasonal influenza vaccination rates, which have never exceeded 49% in any season[3]. Therefore, vaccination rates for Utah's hospital healthcare workers exceed national averages, however, rates for Long Term Care Facility workers were much lower than national averages for 2009–2010 and slightly lower than national averages for previous seasons. Efforts to improve influenza vaccination rates among healthcare workers, particularly Long Term Care Facility workers, are needed in Utah.

A New Universal Influenza Vaccination Recommendation

On February 24, 2010, the Advisory Committee on Immunization Practices (ACIP) that advises the Centers for Disease Control and Prevention (CDC) on vaccine issues, released a new "universal" influenza vaccine recommendation for the 2010–2011 season to expand the annual influenza vaccination to include all people six months of age and older[4]. The new recommendation is intended to remove barriers to influenza vaccination by delivering a simple and clear message to emphasize the importance of influenza vaccination across the lifespan. Previous ACIP recommendations for seasonal influenza vaccination focused on vaccination of higher risk persons, children six months through 18 years of age and close contacts of higher risk persons, approximately 85% of the U.S. population.

The new universal recommendation is intended to provide protection for groups outside of typical high risk groups who were at higher risk of serious flu-related complications during the 2009 H1N1 pandemic, including those people who are obese, post-partum women, and people in certain racial/ethnic groups. Also, because many people in currently recommended "higher risk" groups are unaware of their risk factor or that they are recommended for vaccination, the new recommendation is intended to protect them as well.

The 2010–2011 seasonal vaccine will contain the following three vaccine viruses: an A/California/7/2009 (H1N1)-like virus, an A/Perth/16/2009 (H3N2)-like virus, and a B/Brisbane/60/2008-like virus. The H1N1 virus recommended for inclusion in the 2010–2011 seasonal influenza vaccine is a pandemic 2009 H1N1 virus and is the same virus used in the 2009 H1N1 monovalent vaccine. The H3N2 virus is a change from last year's H3N2 virus, but the Influenza B virus remains unchanged.

References

1. CDC. Interim Results: State Specific Influenza A (H1N1) 2009 Monovalent Vaccination Coverage—United States, October 2009–January 2010. MMWR 2010;59:363–8.
2. CDC. Interim Results: State Specific Seasonal Influenza Vaccination Coverage—United States, August 2009–January 2010. MMWR 2010;59:477–86.
3. CDC. Interim Results: Influenza A (H1N1) 2009 Monovalent and Seasonal Influenza Vaccination Coverage Among Health-Care Personnel—United States, August 2009–January 2010. MMWR 2010;59:357–362.
4. CDC. CDC's Advisory Committee on Immunization Practices (ACIP) Recommends Universal Annual Influenza Vaccination. February 24, 2010. http://www.cdc.gov/media/pressrel/2010/r100224.htm (accessed July 26, 2010).

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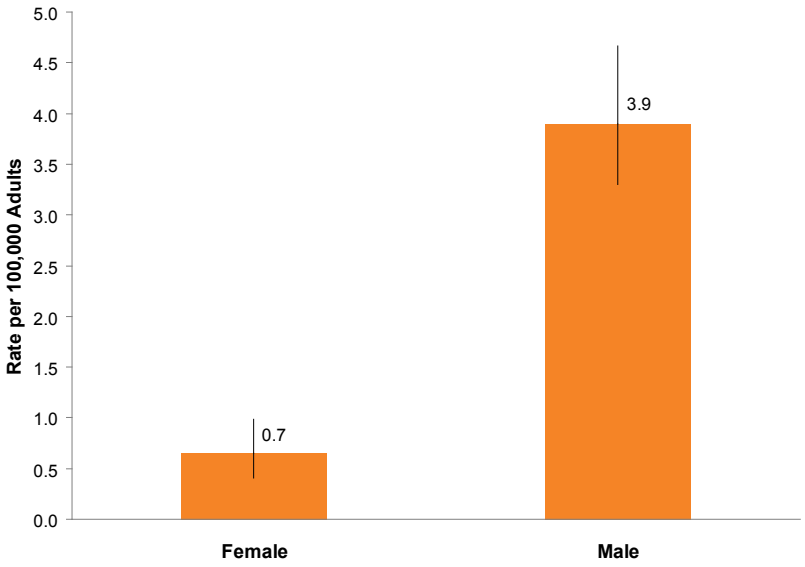
Breaking News, August 2010

Domestic Violence-related Suicides

Until recently, domestic violence (DV)-related suicides have not been clearly defined in Utah. The Utah Violent Death Reporting System (UTVDRS), a Center for Disease Control and Prevention (CDC) initiative to systematically collect violent death data, has provided Utah an opportunity to look at this public health issue. As a result, Utah is noted to be "the only state that has published a more complete picture of the tragic impact domestic violence has on men, women and children."[1]

Number of DV-related Suicides per 100,000 Adults by Sex, UTVDRS 2005–2008, Utah, n=165 (age-adjusted)



From 2005–2008, there were three adult DV-related suicides per month. Males were more likely to die from a DV-related suicide compared to females (OR=1.6, CI 1.0–2.6). Males also had a significantly higher rate (Figure 1). When individuals who are abusive towards their intimate partners threaten suicide, this indicates an increased risk of homicide.[2] Ten percent of DV-related suicide victims committed homicides prior to their deaths. Ninety-one percent of the victims experienced a crisis, or an impending crisis, within two weeks of their death. Sixty-eight percent of the victims were found to be a perpetrator of interpersonal violence in the past month and 41.8 percent disclosed their intent to commit suicide. Please go to http://www.health.utah.gov/vipp/domesticViolence/DVData.htm for more information on domestic violence in Utah.

1. Davis, Richard L. Domestic violence-related deaths. Journal of Aggression, Conflict and Peace Research 2010; Vol 2 Issue 2 44-52.
2. Hobart, Margaret. *Honoring Their Lives, Learning From Their Deaths: Finding and Recommendations*. Washington State Domestic Violence Fatality Review, Washington State Coalition Against Domestic Violence 2000: 35.

Community Health Indicators Spotlight, August 2010

Utah Hispanic/Latino Disease Trends

A recent analysis of trends in disease and disease-related death in the Utah Hispanic/Latino population showed improvement over time in 10 of 11 indicators. The Utah Hispanic/Latino rates were better than the statewide rates for some of these measures, including arthritis; coronary heart disease death; and breast and prostate cancers. Utah Hispanics/Latinos still had higher rates of gonorrhea and tuberculosis than Utahns statewide in spite of the improvement over time. Chlamydia is the only disease rate which increased among Utah Hispanics/Latinos since baseline. Chlamydia has been on the rise statewide and among all races and ethnicities for whom data are available. For more information about trends in minority health, see http://health.utah.gov/cmh/data/MovingForward.pdf.

Utah Hispanic/Latino Disease Indicators Compared to Baseline

	Recent Hispanic Rate (95% CI)	Baseline
Chlamydia Incidence/100,000 population[1]	**447.6** (425.3-470.8)	**402.1**
Gonorrhea Incidence/100,000 population[1]	**26.4** (21.2-32.5)	**34.6**
Tuberculosis Incidence/100,000 population[2]	**4.2** (3.2-5.3)	**5.9**
Arthritis Prevalence*[3]	**18.8%** (15.7-22.2)	**22.9%**
Colorectal Cancer Incidence/100,000 population*[4]	**40.3** (34.8-46.4)	**48.2**
Lung Cancer Incidence/100,000 population*[4]	**30.5** (25.5-36.0)	**40.0**
Breast Cancer Incidence/100,000 female population*[4]	**89.2** (79.2-100.1)	**111.5**
Prostate Cancer Incidence/100,000 male population*[4]	**135.2** (119.3-152.3)	**168.0**
Diabetes Death/100,000 population*[5]	**68.2** (51.4-88.7)	**99.8**
Coronary Heart Disease Death/100,000 population*[5]	**53.2** (38.5-71.6)	**71.7**
Stroke Death/100,000 population*[5]	**30.5** (19.7-45.1)	**49.9**

* Age-adjusted to the U.S. 2000 standard population
1. Source: Bureau of Communicable Disease Control/Epidemiology. Recent: 2008. Baseline: 2000-2004.
2. Source: Bureau of Communicable Disease Control/Epidemiology. Recent: 2004-2008. Baseline: 2000-2004.
3. Source: Behavioral Risk Factor Surveillance System. Recent: 2003, 2005, 2007. Baseline: 2000-2003
4. Source: Surveillance, Epidemiology, and End Results Program. Recent: 2000-2006. Baseline: 1997-2001.
5. Source: Utah Death Certificates. Recent: 2004-2008. Baseline: 2000-2003

Monthly Health Indicators Report

(Data Through July 2010)

Monthly Report of Notifiable Diseases, July 2010	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (Campylobacter)	48	44	242	195	1.2
Shiga toxin-producing Escherichia coli (E. coli)	16	24	42	56	0.7
Hepatitis A (infectious hepatitis)	1	1	6	8	0.8
Hepatitis B, acute infections (serum hepatitis)	1	1	6	12	0.5
Meningococcal Disease	0	1	1	6	0.2
Pertussis (Whooping Cough)	21	36	146	257	0.6
Salmonellosis (Salmonella)	29	42	198	201	1.0
Shigellosis (Shigella)	5	5	22	22	1.0
Varicella (Chickenpox)	1	10	217	460	0.5
West Nile (human cases)	0	8	0	9	0.0
Quarterly Report of Notifiable Diseases, 2nd Qtr 2010	**Current Quarter # Cases**	**Current Quarter # Expected Cases (5-yr average)**	**# Cases YTD**	**# Expected YTD (5-yr average)**	**YTD Standard Morbidity Ratio (obs/exp)**
HIV/AIDS*	19	35	45	67	0.7
Chlamydia	1,584	1,341	3,227	2,744	1.2
Gonorrhea	108	157	181	329	0.6
Tuberculosis	9	9	13	17	0.8
Medicaid Expenditures (in Millions) for the Month of July 2010	**Current Month**	**Expected/ Budgeted for Month**	**Fiscal YTD**	**Budgeted Fiscal YTD**	**Variance - over (under) budget**
Capitated Mental Health	$ 0.7	$ 5.5	$ 107.9	$ 125.9	$ (18.0)
Inpatient Hospital	$ 16.0	$ 13.7	$ 270.0	$ 254.2	$ 15.8
Outpatient Hospital	$ 7.2	$ 5.0	$ 113.9	$ 113.6	$ 0.3
Long Term Care	$ 7.7	$ 6.8	$ 175.6	$ 170.2	$ 5.4
Pharmacy†	$ 2.3	$ 9.1	$ 152.4	$ 157.1	$ (4.7)
Physician/Osteo Services‡	$ 4.1	$ 3.5	$ 87.0	$ 80.1	$ 6.9
TOTAL HCF MEDICAID	$ 106.4	$ 78.6	$ 1,709.9	$ 1,752.5	$ (42.6)

Program Enrollment for the Month of July 2010	Current Month	Previous Month	% Change§ From Previous Month	1 Year Ago	% Change§ From 1 Year Ago
Medicaid	222,380	221,954	+0.2%	197,248	+12.7%
PCN (Primary Care Network)	15,293	14,946	+2.3%	23,438	-34.8%
CHIP (Children's Health Ins. Plan)	40,867	42,068	-2.9%	40,131	+1.8%
	Annual Visits			Annual Charges	
Health Care System Measures	**Number of Events**	**Rate per 100 Population**	**% Change§ From Previous Year**	**Total Charges in Millions**	**% Change§ From Previous Year**
Overall Hospitalizations (2008)	279,504	9.4%	-2.7%	$ 4,703.3	+10.3%
Non-maternity Hospitalizations (2008)	164,602	5.4%	-3.0%	$ 3,924.7	+10.4%
Emergency Department Encounters (2008)	681,958	23.4%	-2.9%	$ 879.5	+12.6%
Outpatient Surgery (2008)	299,958	10.3%	-1.9%	$ 1,277.7	+15.2%
Annual Community Health Measures	**Current Data Year**	**Number Affected**	**Percent/ Rate**	**% Change§ From Previous Year**	**State Rank¶ (1 is best)**
Obesity (Adults 18+)	2009	465,600	24.0%	+3.9%	11 (2009)
Cigarette Smoking (Adults 18+)	2009	190,300	9.8%	+5.4%	1 (2009)
Influenza Immunization (Adults 65+)	2009	174,400	68.8%	-6.2%	33 (2009)
Health Insurance Coverage (Uninsured)	2009	314,300	11.2%	+4.7%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2008	268	9.7 / 100,000	-2.5%	15 (2007)
Poisoning Deaths	2008	500	18.1 / 100,000	-8.5%	49 (2007)
Suicide Deaths	2009	445	15.9 / 100,000	+15.3%	n/a
Diabetes Prevalence (Adults 18+)	2009	118,500	6.1%	+0.2%	11 (2009)
Poor Mental Health (Adults 18+)	2009	291,600	15.0%	+7.0%	19 (2009)
Coronary Heart Disease Deaths	2008	1,514	54.9 / 100,000	-3.2%	2 (2006)
All Cancer Deaths	2008	2,478	89.9 / 100,000	-4.8%	1 (2006)
Stroke Deaths	2008	739	26.8 / 100,000	-0.2%	7 (2006)
Births to Adolescents (Ages 15-17)	2008	1,122	18.5 / 1,000	-0.6%	14 (2006)
Early Prenatal Care	2008	43,997	79.1%	-0.4%	n/a
Infant Mortality	2008	264	4.7 / 1,000	-7.9%	4 (2007)
Childhood Immunization (4:3:1:3:3:1)	2009	41,500	76.6%	+4.1%	20 (2008)

* Diagnosed HIV infections, regardless of AIDS diagnosis.
† The Pharmacy Expenditure and Budget amount only includes the gross pharmacy costs. The Pharmacy Rebate and Pharmacy Part-D amounts are excluded from this line item.
‡ Medicaid payments reported under Physician/Osteo Services do not include enhanced physician payments.
§ % Change could be due to random variation.
¶ State rank based on age-adjusted rates.
Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for influenza has ended until the 2010 season.