

# Utah Health Status Update:

## Utah 2009–2010 Influenza Season

March 2010

Utah Department of Health

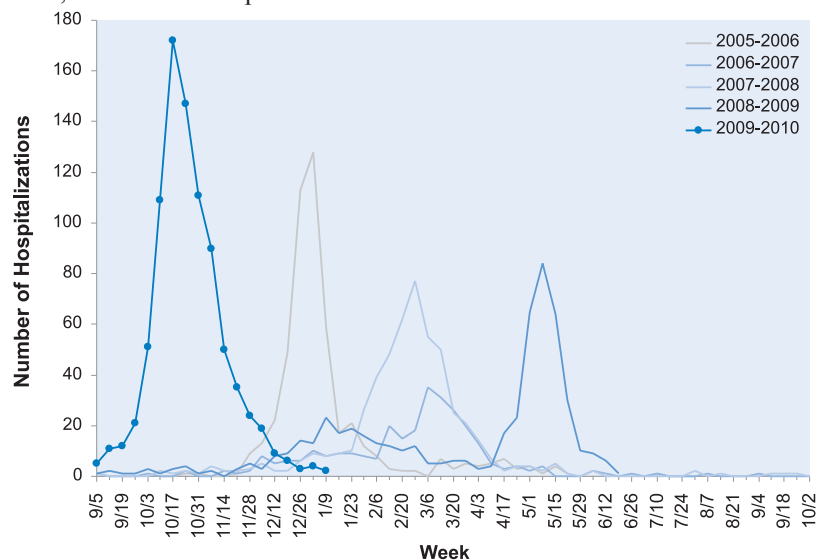
The 2009–2010 influenza season has been one of the most active influenza seasons seen in Utah, due largely to the presence of influenza A H1N1. As of January 20, 2010, 883 influenza-associated hospitalizations have been reported to the Utah Department of Health. Influenza activity peaked the week of October 11, with 174 influenza-associated hospitalizations occurring and 9.0% of all outpatients being seen for influenza-like illness. By comparison, depending on the season, between 250–500 influenza-associated hospitalizations are reported in Utah during a typical influenza season, with peak activity occurring in February and March (Figure 1). Of the 751 hospitalized cases with a known influenza subtype, 735 (98%) were due to influenza A H1N1, while three seasonal strains made up the remaining 2%.

Typically, the majority of hospitalized cases of influenza are seen in children under the age of 5 and adults 65 years and older. This season, however, the majority of hospitalizations were seen in persons aged 5–49 years of age, although the majority still had typical risk factors for severe influenza illness (Figure 2). Additionally, the most severe hospitalizations and deaths occurred in younger adults, with 31% of ICU cases and 40% of deaths in adults aged 25–49. This trend has also been seen consistently across the nation.

Since the first case of influenza A H1N1 was identified in Utah on April 27, 2009, two distinct waves of influenza activity have occurred, and a total of 1,311 cases of hospitalized influenza have been reported. As expected, the second wave of influenza A H1N1 has been much stronger than the first (Figure 3). Minorities have been disproportionately affected by influenza A H1N1, particularly in the first wave (Figure 4). In the first wave, half of all cases were minorities. In the second wave, a third of all cases were minorities, a trend that is consistent with what is usually seen for seasonal influenza in Utah. Native Hawaiian and Pacific Islanders have had the highest rates of influenza in both the first and

### Influenza-associated Hospitalizations

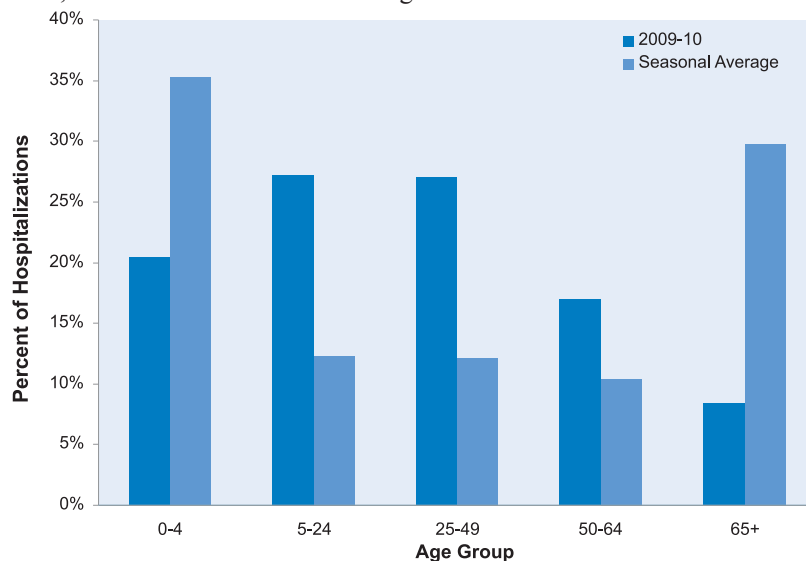
Figure 1. Number of influenza-associated hospitalizations by event date\*, Utah, 2009–2010 and previous four seasons



\* Event date is calculated based on a hierarchy of dates: 1) onset date, 2) specimen collection date, 3) date reported to public health.

### Influenza-associated Hospitalizations by Age

Figure 2. Percent of influenza-associated hospitalizations by age group, Utah, 2009–2010 and seasonal average



second waves (197 cases per 100,000 people and 126 cases per 100,000 people, respectively), compared to White, non-Hispanics that have had the lowest rates (10 cases per 100,000 people and 27 cases per 100,000 people for waves one and two, respectively). Additionally, the first wave saw the majority of activity (63%) in Salt Lake County residents. The second wave has seen cases spread more evenly throughout the state,

with only 34% of cases residing in Salt Lake County. The geographic distribution of cases for the second wave is similar to what is seen for seasonal influenza.

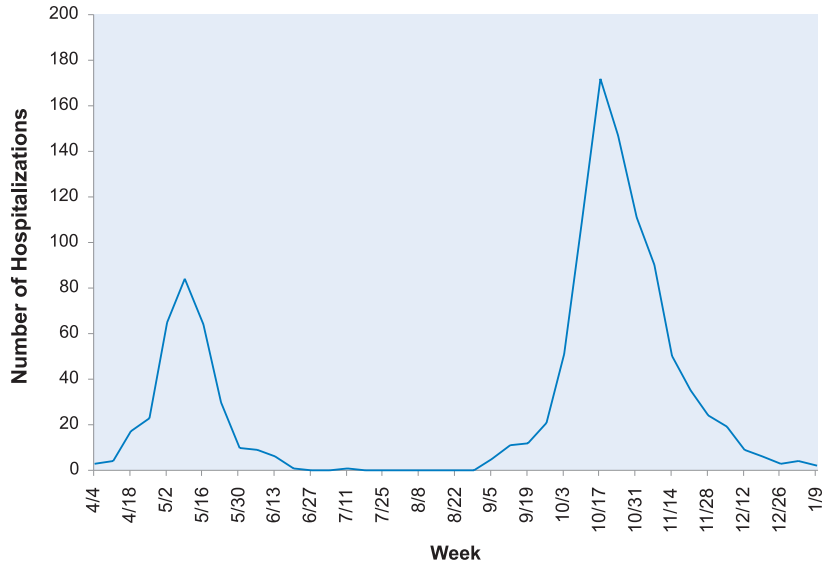
Persons hospitalized with influenza A H1N1 are more likely to require ICU care than those with seasonal influenza. In Utah, 28% of all hospitalized cases in the first wave required ICU care, while 20% of all hospitalized cases required ICU care in the second wave. Comparatively, only 13% of cases hospitalized with seasonal influenza require an ICU stay. While pregnant women are at risk for complications resulting from infection with any strain of influenza, pregnant women are particularly at risk for complications from influenza A H1N1 infection. In Utah, 5% of all cases in the first wave were pregnant, while 7% of all cases in the second wave were pregnant. On average, 3% of all seasonal influenza cases are pregnant.

A total of 48 deaths (21 from the first wave, 27 from the second wave) from influenza A H1N1 have been identified in Utah since April. The majority (63%) of deaths have been in adults aged 25–64. Of the 27 deaths that have occurred since the second wave began, 20 (74%) have been female. This trend was not seen during the first wave, where deaths were split evenly between the two genders, and is not typical of seasonal influenza. A reason for why females in Utah are more likely to die from influenza A H1N1 has yet to be identified. Forty (85%) deaths had an identifiable risk factor, while two (4%) deaths had no identifiable risk factor. It is unclear whether the remaining five (11%) had a risk factor for severe influenza illness.

While all indicators at this time suggest that influenza is circulating at very low levels, it is probable that another smaller wave of influenza could still be seen in Utah and nationally before the end of this influenza season. If this does occur it will likely be due to the circulation of typical seasonal influenza strains, and not influenza A H1N1.

## Influenza-associated Hospitalizations

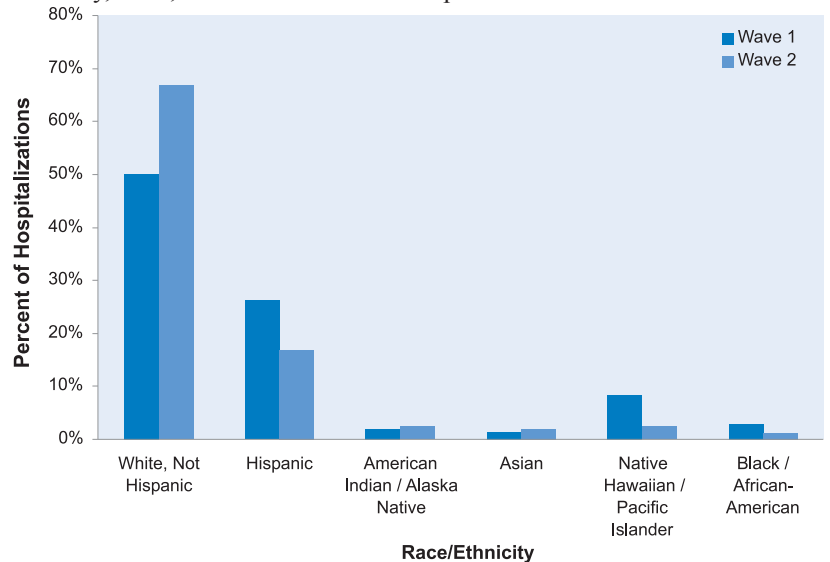
Figure 3. Number of influenza-associated hospitalizations by event date\*, Utah, 2009 Influenza A H1N1 pandemic



\* Event date is calculated based on a hierarchy of dates: 1) onset date, 2) specimen collection date, 3) date reported to public health.

## Influenza-associated Hospitalizations by Race and Ethnicity

Figure 4. Number of influenza-associated hospitalizations by race and ethnicity, Utah, 2009 Influenza A H1N1 pandemic



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For additional information about this topic, contact **Rachelle Boulton, MSPH, Communicable Disease Analysis and Reporting Program, Utah Department of Health, Box 142104, Salt Lake City, UT 84114-2104, (801) 538-6191, email: [rboulton@utah.gov](mailto:rboulton@utah.gov), or the Office of Public Health Assessment, Utah Department of Health, Box 142101, Salt Lake City, UT 84114-2101, (801) 538-9191, email: [chdata@utah.gov](mailto:chdata@utah.gov)**

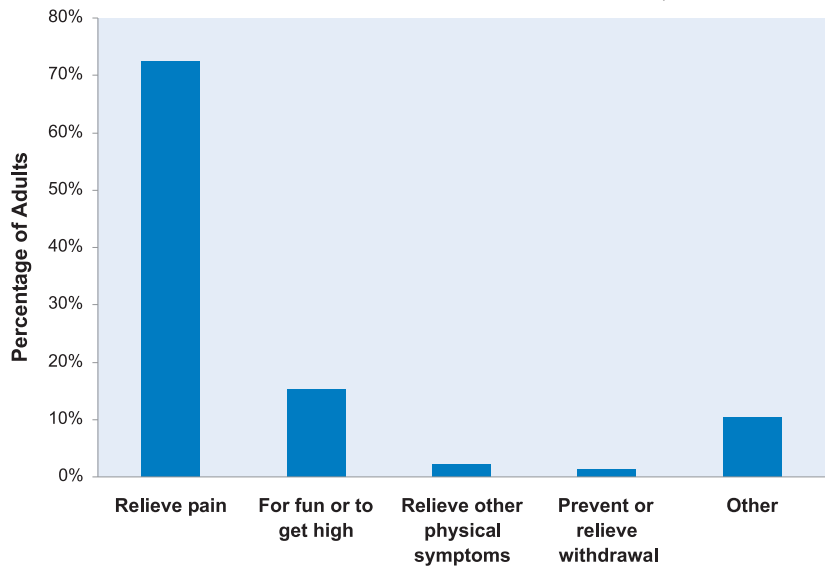
## Breaking News, February 2010

### BRFSS Findings on State-added Prescription Pain Medication Questions

Prescription pain medications have been involved in increasing numbers of fatal and nonfatal overdoses in the state of Utah and throughout the nation. To better understand how Utahns obtain and use prescription pain medication we added 12 questions to the 2008 Utah Behavioral Risk Factor Surveillance System (BRFSS) survey. Random-digit dialing was used to contact non-institutionalized, adult survey participants. A total of 5,330 individuals throughout the state of Utah completed the interview. Findings from the survey indicated that being prescribed a prescription opioid was common; over one-fifth (20.8%) of Utah adults were prescribed opioid pain medications during the past year. Of those who specified an opioid when asked what kind of pain medication they were prescribed during the past year, 72% reported having leftover (unused) medications. Over two-thirds of adults with leftover medications reported that they kept the medications.

Approximately 2% of adults reported using prescription opioids in the past year that were not prescribed to them. Of those, 97% reported receiving the medication from a friend or relative and 85.2% reported that the medication was given to them for free. Sharing controlled substances such as prescription opioids is a serious public health concern as people are medicating with potentially lethal drugs without clinical supervision. Additionally, sharing controlled substances is a felony offense in Utah.

**Reasons Given by Utah Adults for Why They Used Opioid Pain Medication Not Prescribed to Them in the Past Year, BRFSS 2008**



## Community Health Indicators Spotlight, February 2010

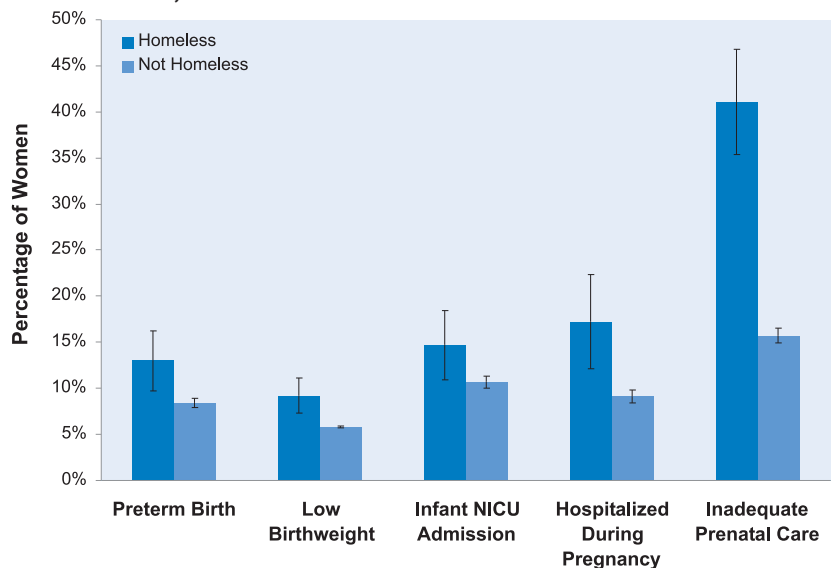
### Homelessness During Pregnancy in Utah

Being homeless during pregnancy can have an acute impact on both mother and infant. According to 2008 Utah Pregnancy Risk Assessment Monitoring System (PRAMS) data, 3.1% (approximately 1,650) of Utah women who answered the survey reported being homeless during pregnancy. A review of PRAMS data from 2004–2008 finds that women who are of younger ages, unmarried, of lower educational levels, Hispanic, and of lower income levels are more likely to report being homeless during pregnancy.

Research shows that homeless women are at increased risk for adverse pregnancy outcomes. PRAMS data supports this as women in this sample who reported homelessness had significantly higher rates of low birthweight, preterm birth, hospitalization during pregnancy, neonatal intensive care unit admissions, and inadequate prenatal care. While public assistance is available, in our sample of homeless women, only 36.7% reported applying. The most frequent reason cited for not applying for assistance (35.5%) was not knowing how to apply. And despite 83% of homeless women reporting incomes that would presumably qualify them for prenatal Medicaid, only 57% reported having coverage.

It is important to note that this survey method may underestimate homelessness. Women who were homeless at the time of the survey were without mail or phone access, and were unable to be contacted to complete the survey. It is apparent that homelessness during pregnancy and the resulting outcomes warrant further study.

**Adverse Pregnancy Outcomes by Homeless Status, Utah PRAMS Data, 2004–2008**



# Monthly Health Indicators Report

(Data Through January 2010)

<b>Monthly Report of Notifiable Diseases, January 2010</b>	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)	19	12	19	12	1.6
Shiga toxin-producing Escherichia coli (E. coli)	0	2	0	2	0.0
Hepatitis A (infectious hepatitis)	1	1	1	1	0.7
Hepatitis B, acute infections (serum hepatitis)	1	2	1	2	0.6
Influenza†	Weekly updates at <a href="http://health.utah.gov/cpi/diseases/flu">http://health.utah.gov/cpi/diseases/flu</a>				
Measles (Rubeola, Hard Measles)	0	0	0	0	--
Meningococcal Disease	0	1	0	1	0.0
Norovirus	3	2	3	2	1.4
Pertussis (Whooping Cough)	37	34	37	34	1.1
Salmonellosis (Salmonella)	30	13	30	13	2.3
Shigellosis (Shigella)	1	3	1	3	0.4
Varicella (Chickenpox)	78	87	78	87	0.9
Viral and Aseptic Meningitis	4	2	4	2	2.2
<b>Notifiable Diseases Reported Quarterly, 4th Qtr 2009</b>	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV	47	27	112	91	1.2
AIDS	10	11	44	44	1.0
Chlamydia	1,447	1,317	5,941	5,105	1.2
Gonorrhea	118	176	335	706	0.5
Tuberculosis	10	8	37	33	1.1
<b>Program Enrollment for the Month of January 2010</b>	Current Month	Previous Month	% Change <sup>s</sup> From Previous Month	1 Year Ago	% Change <sup>s</sup> From 1 Year Ago
Medicaid	207,781	206,351	+0.7%	178,267	+16.6%
PCN (Primary Care Network)	17,926	18,494	-3.1%	15,764	+13.7%
CHIP (Children's Health Ins. Plan)	40,579	41,748	-2.8%	36,602	+10.9%

<b>Medicaid Expenditures (in Millions) for the Month of January 2010</b>	Current Month	Expected/Budgeted for Month*	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Capitated Mental Health	\$ 10.9	\$ 12.0	\$ 65.2	\$ 66.0	\$ (0.8)
Inpatient Hospital	\$ 27.9	\$ 21.6	\$ 135.6	\$ 119.0	\$ 16.6
Outpatient Hospital	\$ 10.5	\$ 10.8	\$ 63.6	\$ 59.5	\$ 4.1
Long Term Care	\$ 19.7	\$ 18.7	\$ 110.1	\$ 107.5	\$ 2.7
Pharmacy <sup>β</sup>	\$ 14.9	\$ 12.6	\$ 87.2	\$ 69.6	\$ 17.6
Physician/Osteo Services <sup>‡</sup>	\$ 11.0	\$ 7.6	\$ 46.9	\$ 42.0	\$ 4.9
<b>TOTAL HCF MEDICAID</b>	<b>\$ 181.9</b>	<b>\$ 169.4</b>	<b>\$ 917.9</b>	<b>\$ 938.7</b>	<b>\$ (20.9)</b>
<b>Health Care System Measures</b>	Number of Events	Rate per 100 Population	% Change <sup>s</sup> From Previous Year	Total Charges in Millions	% Change <sup>s</sup> 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 (2007)	682,122	24.0%	-1.3%	\$ 781.0	+17.1%
Outpatient Surgery (2007)	296,596	10.5%	-5.7%	\$ 1,109.0	+8.6%
<b>Annual Community Health Measures</b>	Current Data Year	Population at Risk	Number Affected	Percent/Rate	% Change <sup>s</sup> From Previous Year
Overweight and Obesity (Adults 18+)	2008	1,924,274	1,119,500	58.2%	+0.5%
Cigarette Smoking (Adults 18+)	2008	1,924,274	179,200	9.3%	-20.4%
Influenza Immunization (Adults 65+)	2008	237,275	173,900	73.3%	-3.8%
Health Insurance Coverage (Uninsured)	2008	2,781,954	298,200	10.7%	+0.7%
Motor Vehicle Crash Injury Deaths	2008	2,781,954	268	9.6 / 100,000	-3.3%
Suicide Deaths	2008	2,781,954	384	13.8 / 100,000	+1.3%
Diabetes Prevalence	2008	2,781,954	129,500	4.7%	-1.0%
Coronary Heart Disease Deaths	2008	2,781,954	1,514	54.4 / 100,000	-4.0%
All Cancer Deaths	2008	2,781,954	2,478	89.1 / 100,000	-5.6%
Births to Adolescents (Ages 15-17)	2008	61,727	1,122	18.2 / 1,000	-2.0%
Early Prenatal Care	2008	55,605	43,997	79.1%	-0.4%
Infant Mortality	2008	55,605	264	4.7 / 1,000	-7.9%
Childhood Immunization (4:3:1:3:3:1)	2009	55,120	42,200	76.6%	+4.1%

† Influenza activity remains sporadic in Utah. Influenza-like illness activity is above baseline statewide (most likely due to the circulation of other respiratory viruses). As of February 17, 2010, 887 influenza-associated hospitalizations have been reported to the UDOH. More information can be found at <http://health.utah.gov/epi/diseases/flu>.

‡ % Change could be due to random variation.

\* The Medicaid program service budget numbers by month are not available at this time.

β 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.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile virus has ended until the 2010 season.