

# 2007 Utah Hospital Comparison Report on Pneumonia Hospitalizations for Adults 2004-2006

## Introduction



Welcome to the 2007 Utah Hospital Comparison Report on Pneumonia Hospitalizations for Adults, 2004-2006. If you or someone you know has pneumonia or signs of pneumonia, you may find this report helpful when considering where to receive treatment. The Utah Health Data Committee has provided this information to help you choose a hospital and make other decisions about your health care.

## **Hospital Quality and Safety**

See the tables in this report for information on the following:

- ✓ Adult Pneumonia Deaths in Utah Hospitals

Many factors affect a hospital's performance on quality measures. Read the online report for more information.

**Note:** The data include patients with do not resuscitate (DNR) orders and palliative care patients (terminally ill patients requesting comfort care only). Hospitals that treat a larger share of these patients may have higher-than-expected mortality rates but still may be providing good quality care.

Other quality measures can be found at websites for Hospital Compare and *HealthInsight*.

**See the online report for more about the following:**

- Adult Immunization for Pneumonia
- Quality of Pneumonia Treatment in Utah Hospitals

Read more about methods and measures used for the hospital quality of care section in this report in Methods and Measures.

## **Hospital Charges**

See the tables in this report for information on comparing Utah's hospitals for the following surgeries or conditions:

✓ Pneumonia Among Adults

Your charges may be higher or lower than the average charges shown in the above tables. It is important to remember that “charge” is not the same as “total cost” or “total payment” to the hospital.

**Note:** Many factors will affect the cost for your hospital stay. Read more in the “About the Report” section later in this report. You can also find more information about these factors at the Utah PricePoint website (<http://www.utpricepoint.org>).

**See the online report for more about the following:**

- ✓ Pneumonia (Causes, Symptoms, Treatment)
- ✓ Preventing Pneumonia

Read more about methods and measures used for the hospital charge section in this report in Methods and Measures.

**Please be aware that information in this report is neither intended nor implied to be a substitute for professional medical advice. Always ask questions and seek the advice of your physician or other qualified health provider prior to starting any new treatment.**

**CALL YOUR HEALTHCARE PROVIDER IMMEDIATELY IF YOU THINK YOU MAY HAVE A MEDICAL EMERGENCY.**

## **Key Findings**



### **How did Utah quality of care compare with the nation in 2004 through 2006?**

For in-hospital deaths, Utah hospitals overall (all hospitals combined) had a lower percentage than expected compared to similar adult inpatients nationwide for pneumonia. Utah overall means all Utah hospitals combined. Measures used are in parentheses. For more details, see the Technical Document.

From 2004 through 2006, in Utah hospitals treated at least 30 patients certain kinds of pneumonia (IQI 20)

- 12 hospitals (32%) had fewer deaths than expected. Two of these hospitals had no in-hospital adult pneumonia deaths from 2004 through 2006.
- 25 hospitals (66%) had about as many deaths as expected.
- One hospital had more deaths than expected.

There are many kinds of pneumonia as well as many causes and risk factors. This report includes some of the more common kinds of bacterial, viral and mycoplasma pneumonia among adults. Read more about kinds of pneumonia under Additional Resources and this report's Technical Document.

**Note that many factors can affect in-hospital deaths at a particular hospital.** Read more in "About the Report".

## **How did hospital charges differ among Utah hospitals in 2006?**

Average hospital charges among adult pneumonia patients in this report differed widely in 2006. Measures used are in parentheses. For more details, see the Technical Document. For patients at the minor/moderate illness level, average hospital charges ranged from:

- \$2,752 to \$11,394 for patients with minor/moderate illness level
- \$5,847 to \$24,366 for patients with major/extreme illness level

As expected, average hospital charge for inpatients treated at the major/extreme illness level was higher. Often these patients require more complex treatment and longer hospital stays than patients at the minor/moderate illness level. However, patients who are very ill and die before they receive much treatment or have "do not resuscitate" orders may have low charges. For a complete list of kinds of pneumonia included in this report, see this report's Technical Document.

**Note that many factors will affect hospital charges.** Read more in "About the Report".

## **About the Report**



### **Why is this report important to me?**

If you or someone you know has pneumonia or signs of pneumonia, you may find this report helpful when considering where to receive treatment. Hospitals can vary, sometimes quite a bit, in terms of what they charge and their quality and safety for patients.

*This report is not intended to be anyone's sole source of information about hospital quality, safety and charges in Utah.* Rather, it is designed to provide helpful information that can play an important role in evaluating hospitals, along with other sources including doctor recommendations.

### **Why are you producing this report?**

The 2007 Utah Hospital Comparison Report on Pneumonia Hospitalizations for Adults, 2004-2006, is one of a series of health care consumer reports that the Office of Health Care Statistics (OHCS) has developed in response to Senate Bill 132. Read more at <http://www.le.state.ut.us/~2005/bills/sbillenr/sb0132.htm>.

Consumers are encouraged to use the information in these reports to ask questions of their provider, hospital or insurance representative. Let them know you plan to take an active role in your health care decisions.

## **What is the purpose of the Utah Health Data Committee?**

The Utah Health Data Committee was established by the Utah Legislature in 1990 to collect, analyze and distribute state Health Care data. Since December 2005, the Committee has released a series of consumer reports comparing health care in Utah's hospitals. The OHCS serves as staff for the Utah health Data Committee and produces these reports. Read more at <http://www.health.utah.gov/hda/>.

## **Who else helped to shape this report?**

Utah citizens continually review our consumer reports to make sure they are understandable and easy to read. Public input helps us to create user-friendly reports for people who are not medical experts yet need useful health care information. Read more at <http://health.utah.gov/myhealthcare/evaluation.html>.

Leading physicians and health educators reviewed the report's medical information. Five biostatisticians assisted in selecting the appropriate statistical method for comparing hospital performance.

## **About the Data**



### **Where do the data come from?**

Most of the data in this report come from inpatient hospital claim records. Utah hospitals are required by law to submit a standard set of information about each patient who spends at least one night in the hospital to the Office of Health Care Statistics, Utah Department of Health, for the Utah Hospital Discharge Database. The Agency for Health Care Research and Quality (AHRQ), a federal agency in charge of quality of care, provided national information. For further information, visit the AHRQ Website at <http://www.ahrq.gov/>.

### **Have the data been verified by others?**

Yes, Utah hospitals review the data for accuracy during a review period of at least 30 days while the report is being developed. They review the completed report before it is released. Hospitals may

submit comments to be posted on online as part of the report.

### **Why use these indicators/measures?**

AHRQ developed the Inpatient Quality Indicators (IQIs) for in-hospital deaths used in this report. The IQIs allow comparison among Utah hospitals with similar patients nationwide. This report shows one IQI for in-hospital pneumonia deaths. Read more at <http://www.qualityindicators.ahrq.gov/>.

The measure for average charge is an All Patient Refined Diagnosis Related Group (APR-DRG) for similar, though not identical, conditions and procedures. Also, please keep in mind that for death rates, three years of data are used, while a single year is used for charges. For these reasons, the number of patients for APR-DRGs and IQIs with similar names may not be the same. Read more at [http://solutions.3m.com/wps/portal/3M/en\\_US/3MHIS/HealthInformationSystems/products-services/product-list/apr-drg-classification/](http://solutions.3m.com/wps/portal/3M/en_US/3MHIS/HealthInformationSystems/products-services/product-list/apr-drg-classification/).

### **What are limitations of quality comparisons in the report?**

Many factors affect a hospital's performance on quality and safety measures. Such factors include the hospital's size, the number of pneumonia cases, available specialists, teaching status and especially how ill the hospital's patients are. Hospitals that treat high-risk (very ill) patients may have higher percentages of deaths than hospitals that transfer these patients. Hospitals that treat patients with do not resuscitate (DNR) orders or other terminally ill patients receiving palliative care (comfort care) only may have higher percentages of deaths. Hospitals may report patient diagnosis codes differently which could impact the comparison of quality measurement among hospitals. The quality indicators adjust for how ill each hospital's patients are, but the adjustment may not capture the full complexity of the patient's condition. The Utah Hospital Discharge Database includes up to nine diagnoses and up to six procedures for each patient. Some patients have additional diagnoses and procedures that are not included in this database. As a result, the measures of patient illness may not be complete. See Glossary and Technical Document.

### **What are limitations of the charge comparisons in the report?**

The average charge shown in this report differs from "costs," "reimbursement," "price" and "payment." Different payers have different arrangements with each hospital for payment. Many factors will affect the cost for your hospital stay, including whether you have health insurance, the type of insurance and the billing procedures at the hospital. This report excludes outlier (unusually high) charge cases and length of stay cases from the calculation of average charge (see Glossary). The indicators used in this report do not distinguish between patients expected to recover and patients with do not resuscitate (DNR) orders or other patients receiving only palliative care (comfort care).

## Hospitals in Utah

County Name	Hospital Name	Location City, State, Zip	Phone Number
Beaver	Beaver Valley Hospital	Beaver, UT 84713	(435) 438-7100
Beaver	Milford Valley Memorial Hospital	Milford, UT 84751	(435) 387-2411
Box Elder	Bear River Valley Hospital	Tremonton, UT 84337	(435) 257-7441
Box Elder	Brigham City Community Hospital	Brigham City, UT 84302	(435) 734-9471
Cache	Cache Valley Specialty Hospital	North Logan, UT 84341	(435) 713-9700
Cache	Logan Regional Hospital	Logan, UT 84341	(435) 716-1000
Carbon	Castleview Hospital	Price, UT 84501	(435) 637-4800
Davis	Davis Hospital & Medical Center	Layton, UT 84041	(801) 807-1000
Davis	Lakeview Hospital	Bountiful, UT 84010	(801) 299-2200
Duchesne	Uintah Basin Medical Center	Roosevelt, UT 84066	(435) 722-4691
Garfield	Garfield Memorial Hospital	Panguitch, UT 84759	(435) 676-8811
Grand	Allen Memorial Hospital	Moab, UT 84532	(435) 259-7191
Iron	Valley View Medical Center	Cedar City, UT 84720	(435) 868-5000
Juab	Central Valley Medical Center	Nephi, UT 84648	(435) 623-3000
Kane	Kane County Hospital	Kanab, UT 84741	(435) 644-5811
Millard	Delta Community Medical Center	Delta, UT 84624	(435) 864-5591
Millard	Fillmore Community Medical Center	Fillmore, UT 84631	(435) 743-5591
Salt Lake	Alta View Hospital	Sandy, UT 84094	(801) 501-2600
Salt Lake	Cottonwood Hospital	Murray, UT 84107	(801) 314-5300
Salt Lake	Jordan Valley Hospital	West Jordan, UT 84088	(801) 561-8888
Salt Lake	LDS Hospital	Salt Lake City, UT 84143	(801) 408-1100

## Hospitals in Utah (continued)

County Name	Hospital Name	Location City, State, Zip	Phone Number
Salt Lake	Pioneer Valley Hospital	West Valley City, UT 84120	(801) 964-3100
Salt Lake	Primary Children's Medical Center	Salt Lake City, UT 84113	(801) 662-1000
Salt Lake	Salt Lake Regional Medical Center	Salt Lake City, UT 84102	(801) 350-4111
Salt Lake	St. Mark's Hospital	Salt Lake City, UT 84124	(801) 268-7700
Salt Lake	University of Utah Hospital	Salt Lake City, UT 84132	(801) 581-2121
Salt Lake	Veteran's Medical Center	Salt Lake City, UT 84148	(801) 582-1565
San Juan	San Juan Hospital	Monticello, UT 84535	(435) 587-2116
Sanpete	Gunnison Valley Hospital	Gunnison, UT 84634	(435) 528-7246
Sanpete	Sanpete Valley Hospital	Mount Pleasant, UT 84647	(435) 462-2441
Sevier	Sevier Valley Hospital	Richfield, UT 84701	(435) 896-8271
Tooele	Mountain West Medical Center	Tooele, UT 84074	(435) 843-3600
Uintah	Ashley Valley Medical Center	Vernal, UT 84078	(435) 789-3342
Utah	American Fork Hospital	American Fork, UT 84003	(801) 855-3300
Utah	Mountain View Hospital	Payson, UT 84651	(801) 465-7000
Utah	Orem Community Hospital	Orem, UT 84057	(801) 224-4080
Utah	Timpanogos Regional Hospital	Orem, UT 84057	(801) 714-6000
Utah	Utah Valley Regional Medical	Provo, UT 84603	(801) 373-7850
Wasatch	Heber Valley Medical Center	Heber City, UT 84032	(435) 654-2500
Washington	Dixie Regional Medical Center	St. George, UT 84790	(435) 251-1000
Weber	McKay-Dee Hospital Center	Ogden, UT 84403	(801) 387-2800
Weber	Ogden Regional Medical Center	Ogden, UT 84405	(801) 479-2111

## **Become an Informed Health Care Consumer**



Choosing a hospital that is right for you or a family member might be one of the most important decisions you'll ever make. You can improve your care and the care of your loved ones by taking an active role in your health care. Remember to ask questions and always consider yourself a partner in your care and treatment.

The following websites contain materials that will help patients choose wisely when making medical decisions:

[Questions are the Answer: Get More Involved in Your Health Care](http://www.ahrq.gov/questionsaretheanswer/index.html)  
<http://www.ahrq.gov/questionsaretheanswer/index.html>

[Guide to Health Quality: How to Know It When You See It](http://www.ahrq.gov/consumer/guidetoq/)  
<http://www.ahrq.gov/consumer/guidetoq/>

[Be an Active Health Care Consumer](http://www.ahrq.gov/path/beactive.htm)  
<http://www.ahrq.gov/path/beactive.htm>

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## **Why use these indicators/measures?**



### **APR-DRGs**

Measures for average hospital charge are All Patient Refined Diagnosis Related Groups (APR-DRGs) for similar, though not identical, kinds of pneumonia in this report's quality of care section. APR-DRG software, widely used in health care research, organizes about 20,000 clinical diagnoses and procedures into about 300 groups.

Each APR-DRG has four severity of illness levels. This report shows average hospital charge for minor and moderate severity of illness levels combined and average hospital charge for major and extreme severity of illness levels combined. This report uses APR-DRG version 20.0, because the Agency for Healthcare Research and Quality (AHRQ) uses it for expected rate and risk-adjusted rate in the Inpatient Quality Indicators (IQIs).



Note that other Utah Department of Health reports that include average charge information use APR-DRG Version 15.0 for data from 2004 and earlier. Read more at [http://solutions.3m.com/wps/portal/3M/en\\_US/3MHIS/HealthInformationSystems](http://solutions.3m.com/wps/portal/3M/en_US/3MHIS/HealthInformationSystems).

## **AHRQ Inpatient Quality Indicators**

The Agency for Health Care Research and Quality (AHRQ), a federal agency in charge of quality of care, developed the Inpatient Quality Indicators (IQIs) used in this report. The IQIs allow comparison among Utah patients and other U.S. hospitals that treated similar patients based on the State Inpatient Databases 2005 through the expected rate. These databases represent about 90% of all inpatients in the U.S. from 37 participating states in 2005. The Health Care Cost and Utilization Project (HCUP) collects these data every year. Read more at <http://www.qualityindicators.ahrq.gov/>.

The AHRQ IQIs are nationally recognized indicators, in compliance with the mandates of Senate Bill 132, the Health Care Consumer's Report Bill passed in 2005. Read more at <http://www.le.state.ut.us/%7E2005/bills/sbillenr/sb0132.htm>.

Please note that the number of patients for each IQI may not be the same as the number of patients for similar APR-DRGs. First, the IQIs are based on three years of data, because the annual number of deaths per indicator often is small. Second, the APR-DRGs are hierarchical, mutually exclusive groups of conditions and procedures. A patient's APR-DRG reflects that patient's most resource-intensive condition and/or procedure. Each IQI has patient exclusion and inclusion criteria that may not be the same as those for a similar APR-DRG. For more information, see this report's Technical Document.

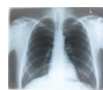
## **AHRQ Patient Safety Indicators**

The Agency for Health Care Research and Quality (AHRQ), a federal agency in charge of quality of care, developed the Patient Safety Indicators (PSIs) used for the hospital comparison reports when applicable. The PSIs allow comparison among Utah patients and other U.S. hospitals that treated similar patients based on the State Inpatient Databases 2005 through the expected rate. These databases represent about 90% of all inpatients in the U.S. from 37 participating states in 2005. The Health Care Cost and Utilization Project (HCUP) collects these data every year. Read more at <http://www.qualityindicators.ahrq.gov/>.

The Patient Safety Indicators (PSIs) are used as a tool to help identify potential adverse events occurring during hospitalization. Adverse events are undesirable and unintended injuries due to medical care or omission of necessary medical care. Widespread consensus exists that health care organizations can reduce patient injuries by improving the environment for safety.

The AHRQ PSIs are nationally recognized indicators, in compliance with the mandates of Senate Bill 132, the Health Care Consumer's Report Bill passed in 2005. Read more at <http://www.le.state.ut.us/%7E2005/bills/sbillenr/sb0132.htm>.

## General Terms Used in This Report



**Actual death percentage:** the actual number of deaths per 100 patients with a certain condition or procedure. Actual death percentage does not adjust for the hospital's case mix. Other name: observed death rate per 100 patients. Some measures exclude transfer patients.

**Actual Rate:** The actual rate is the number of events that occurred for every 100 patients for some indicators and for every 1,000 patients for other indicators. This rate is not risk-adjusted.

**Agency for Health Care Research and Quality (AHRQ):** a federal agency that develops indicators of patient safety and quality of care and engages in other related activities.

**Allergic reaction:** swollen glands, trouble breathing and other body reactions that can be life threatening.

**APR-DRG:** stands for All Patient Refined Diagnosis Related Group, software widely used in health services research. The APR-DRG software organizes about 20,000 clinical diagnoses and procedures into about 300 groups. Each APR-DRG has four levels for severity of illness. This report combines the Minor and Moderate levels and combines the Major and Extreme levels for the average hospital charge tables. This report uses APR-DRG version 20.0. Read more at [www.3m.com/us/healthcare/his/products/coding/refined\\_drg.jhtml](http://www.3m.com/us/healthcare/his/products/coding/refined_drg.jhtml)

**Average charge:** the average dollars for hospital services for which patients were billed at a particular hospital. The charge does not include physicians' professional fees or patient personal costs. The charge may differ from actual payment that the hospital receives. For this report high outlier charges were excluded from each hospital's average charge. A high outlier (unusually high) charge is over 2.5 standard deviations higher than the state mean for each of four subclasses of severity of illness per APR-DRG.

**Expected death percentage:** the number of deaths expected per 100 patients with a certain condition or procedure based on similar patients nationwide in the Health Care Cost and Utilization Project (HCUP) State Inpatient Databases for 2005. Expected death percentage adjusts for the hospital's case mix (patients' age, gender and how ill the patients are). Read more at [www.qualityindicators.ahrq.gov/downloads/iqi/iqi\\_guide\\_v31.pdf](http://www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf).

**Expected Rate:** the number of patients expected for every 100 patients for some indicators and for every 1,000 patients for other indicators with a certain condition or procedure based on similar patients nationwide in the Health Care Cost and Utilization Project (HCUP) State Inpatient Databases for 2005. Expected rate adjusts for the hospital's case mix (patients' age, gender and how ill the patients are). Read more at [www.qualityindicators.ahrq.gov/downloads/iqi/iqi\\_guide\\_v31.pdf](http://www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf).

**Inpatient Quality Indicators (IQI):** were developed by the Agency for Health Care Research and Quality (AHRQ), a federal agency, to be used on inpatient hospital discharge data. AHRQ IQI definitions and methods were used to calculate the actual and expected deaths rates conditions and procedures in this report. AHRQ IQI limitations include possible differences in hospital coding practices and possible inadequacy of the risk adjustment method for expected death percentage. . In some reports AHRQ IQIs and APR-DRGs in Utah Hospital Comparison reports are similar but not identical, so the number of patients may not be the same. See the report specific technical document. Read more at [www.qualityindicators.ahrq.gov/downloads/iqi/iqi\\_guide\\_v31.pdf](http://www.qualityindicators.ahrq.gov/downloads/iqi/iqi_guide_v31.pdf)

**Outlier charge:** a charge by a specified hospital that is more than 2.5 standard deviations higher than the state average by APR-DRG and severity of illness level. This report excludes outlier charge cases. See the Technical Document.

**Patient Safety Indicators (PSIs):** Patient safety is quality improvement of health care to reduce medical injuries (e.g., injuries to patients in a health care setting such as a hospital). The Agency for Healthcare Research and Quality (AHRQ), a federal agency, has developed a set of indicators of patient safety based on the inpatient hospital discharge data. Although hospital discharge data do have some limitations, research shows that PSIs may serve as proxies for patient safety-related performance. AHRQ PSI definitions and analytical methods were used to calculate the three indicators. Read more at [www.qualityindicators.ahrq.gov/](http://www.qualityindicators.ahrq.gov/)

**Severity of illness:** Utah Hospital Comparison reports use two levels of illness based on the APR-DRG's four subclasses for severity of illness (SOI): Minor/Moderate and Major/Severe. Read more in the Technical Document.

**Star rating system:** Utah Hospital Comparison reports use star rating based on a test of statistical significance, the exact 95% confidence interval. For the Heart Surgeries and Conditions Report and the Hip and Knee Surgeries and Conditions Report, this test shows whether the difference between a hospital's actual death percentage and expected death percentage is real (statistically significant,  $p < 0.05$ ) or just due to chance. We calculated the upper and lower exact 95% confidence interval limits for each hospital's actual death rate for each indicator. If the expected death percentage is between the lower and higher limits for the actual death percentage, then we are 95% confident that the actual death rate and the expected death rate are essentially the same. If the higher limit for the actual death percentage is lower than the expected death percentage, then we are 95% confident that the actual death percentage is really lower than the expected death rate. If the lower limit for the actual death percentage is higher than the expected death percentage, then we are 95% confident that the actual death rate is really higher than the expected death rate. See the Technical Document.

**State Inpatient Databases (SID) 2005:** a national sample that represents about 90% of all inpatients from 37 participating states in 2005. The Health Care Cost and Utilization Project (HCUP) collects these data every year. For this report, the percentage of expected deaths for the quality indicators is adjusted using the SID 2005. Read more at [www.hcup-us.ahrq.gov/sidoverview.jsp#What](http://www.hcup-us.ahrq.gov/sidoverview.jsp#What).

**Statistically significant difference:** the star ratings in the AHRQ IQI tables use exact 95% confidence intervals to show whether differences are statistically significant ( $p < 0.05$ ). Read more in the Technical Document.

**Utah overall:** for each specified condition or procedure and severity of illness group (Minor/Moderate or Major/Extreme), all adult cases treated at all Utah hospitals, except some specialty hospitals such as Primary Children's Medical Center. Utah overall average charge is the sum of all reported hospital charges billed to all patients treated at Utah hospitals divided by the number of Utah overall cases except the Veterans Administration. The AHRQ IQI tables include only Utah residents. The APR-DRGs tables include Utah resident and non-resident patients.

## Hip and Knee Related Terms



**Femur:** Thigh bone.

**Fracture of femur:** includes fractures (breaks) of the thigh bone at its neck (upper end), bottom (near the knee) and shaft (along its length). For the definition of the indicators used, see the Technical Document for this hip and knee report.

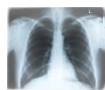
**Hip fracture:** A hip fracture usually is a break of the neck of the femur, just below where it fits into the pelvis, the bones in the lower part of the body. For the definition of the indicators used, see the Technical Document for this hip and knee report. Read more at [http://orthoinfo.aaos.org/fact/thr\\_report.cfm?Thread\\_ID=229&topcategory=Hip](http://orthoinfo.aaos.org/fact/thr_report.cfm?Thread_ID=229&topcategory=Hip)

**Hip replacement or hip joint replacement:** in the Utah Hospital Comparison report includes total, partial and revised hip joint replacement. For the definition of the indicators used, see the Technical Document for this hip and knee report. Read more at [http://orthoinfo.aaos.org/fact/thr\\_report.cfm?Thread\\_ID=504&topcategory=Hip](http://orthoinfo.aaos.org/fact/thr_report.cfm?Thread_ID=504&topcategory=Hip)

**Knee replacement or knee joint replacement:** in the Utah Hospital Comparison report includes total and revised hip joint replacement. For the definition of the indicators used, see the Technical Document for this hip and knee report. Read more at [http://orthoinfo.aaos.org/fact/thr\\_report.cfm?Thread\\_ID=513&topcategory=Knee](http://orthoinfo.aaos.org/fact/thr_report.cfm?Thread_ID=513&topcategory=Knee)).

Medical terms for the hip and knee surgeries and conditions are based on the American Academy of Orthopedic Surgeons, <http://orthoinfo.aaos.org/category.cfm?topcategory=hip>

## **State and National Resources**



### **Utah**

**Check Your Health** - for personal weight loss, nutrition, and/or physical activity information. [www.checkyourhealth.org](http://www.checkyourhealth.org)

**Indicator Based Information System for Public Health (IBIS)** - provides information on the health status of Utahns, the state of the health care system, and Utah public health activities. <http://health.utah.gov/ibis-ph>

**Obesity in Utah** - Did you know that more than HALF of all Utahns are overweight or obese? Your weight directly affects the amount of stress put on your joints. This website offers information about how obesity is affecting people in Utah and the steps being taken to combat its advance. <http://health.utah.gov/obesity/>

**Utah Department of Health Arthritis Program** - created to improve the quality of life for people affected by arthritis; provide family and patient education; and increase participation in programs proven to help people with arthritis. <http://www.health.utah.gov/arthritis/>

### **National**

**American Academy of Orthopaedic Surgeons (AAOS)** - Information on orthopaedic conditions and treatments, injury prevention, wellness and exercise, and more. <http://orthoinfo.aaos.org/main.cfm>

**American Association of Hip and Knee Surgeons** - search for an orthopedic specialist in your area, view a list of other educational websites, and find out what you need to know during your next doctor visit. <http://www.aahks.org/index.asp/fuseaction/patients.main>

**Arthritis Foundation** - national not-for-profit organization that supports the more than 100 types of arthritis and related conditions with advocacy, programs, services and research. <http://www.arthritis.org/>

**Clinical Guidelines and Performance Measures (AAOS)** - valuable tools that will allow you to advance the physician-patient communications process and enhance the diagnosis and treatment of musculoskeletal conditions. <http://www.aaos.org/Research/guidelines/guide.asp>

**Healthfinder®** - your guide to reliable health information, sponsored by the Office of Disease Prevention and Health Promotion. <http://www.healthfinder.gov>

**National Library of Medicine (MedlinePlus)** - extensive information about drugs, an illustrated medical encyclopedia, interactive patient tutorials, and latest health news. <http://medlineplus.gov/>

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# Pneumonia Among Adults

(APR-DRG 139, Other Pneumonia, Age 18 Years and Over)

Average Hospital Charges, 2006

Hospital	Level of Illness			
	Minor/Moderate		Major/Extreme	
	Patients	Average Charge	Patients	Average Charge
<b>Utah Overall</b>	<b>3,008</b>	<b>\$9,056</b>	<b>1,835</b>	<b>\$15,279</b>
Allen Memorial Hospital	19	\$7,131	6	\$5,847
Alta View Hospital	114	\$9,013	60	\$14,885
American Fork Hospital	107	\$7,628	53	\$14,731
Ashley Valley Medical Center	37	\$8,126	22	\$11,579
Bear River Valley Hospital	28	\$5,497	<5	\$10,773
Beaver Valley Hospital	50	\$6,439	27	\$7,885
Brigham City Community Hospital	18	\$6,132	9	\$10,351
Cache Valley Specialty Hospital	<5	\$2,752	0	\$0
Castleview Hospital	83	\$7,380	53	\$10,709
Central Valley Medical Center	31	\$9,726	9	\$15,607
Cottonwood Hospital	169	\$9,204	132	\$13,338
Davis Hospital & Medical Center	105	\$10,280	63	\$16,327
Delta Community Medical Center	22	\$5,346	6	\$5,911
Dixie Regional Medical Center	211	\$9,486	116	\$18,408
Fillmore Community Medical Center	12	\$6,857	<5	\$6,179
Garfield Memorial Hospital	23	\$8,382	13	\$8,992
Gunnison Valley Hospital	47	\$6,873	<5	\$7,007
Heber Valley Medical Center	28	\$6,959	9	\$7,868
Jordan Valley Hospital	130	\$10,656	77	\$17,914
Kane County Hospital	39	\$7,222	5	\$10,949
Lakeview Hospital	98	\$9,397	61	\$16,484
LDS Hospital	141	\$8,587	129	\$13,759

## Table Legend

< 5 = 1 to 4 patients

## State average hospital length of stay

Minor/Moderate is 3.2 days

Major/Extreme is 4.7 days.

[Click here to read Data Limitations.](#)

Continued on Next Page

**Level of Illness:** Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

**Average Charge:** The average dollars for hospital services for which patients were billed at a particular hospital. The charge does not include physicians' professional fees or patient personal costs.

# Pneumonia Among Adults

(APR-DRG 139, Other Pneumonia, Age 18 Years and Over)

Average Hospital Charges, 2006

- CONTINUED -

Hospital	Level of Illness			
	Minor/Moderate		Major/Extreme	
	Patients	Average Charge	Patients	Average Charge
<b>Utah Overall</b>	<b>3,008</b>	<b>\$9,056</b>	<b>1,835</b>	<b>\$15,279</b>
Logan Regional Hospital	85	\$7,491	61	\$12,955
McKay-Dee Hospital	233	\$8,836	153	\$15,258
Mountain View Hospital	67	\$11,090	34	\$18,305
Mountain West Medical Center	46	\$11,394	15	\$15,603
Ogden Regional Medical Center	97	\$10,335	68	\$14,012
Pioneer Valley Hospital	129	\$11,009	68	\$19,409
Salt Lake Regional Medical Center	55	\$11,031	32	\$17,297
San Juan Hospital	12	\$8,666	7	\$7,233
Sanpete Valley Hospital	47	\$8,039	10	\$12,888
Sevier Valley Hospital	38	\$6,958	26	\$11,011
St. Mark's Hospital	199	\$10,544	142	\$17,964
Timpanogos Regional Hospital	46	\$10,039	30	\$24,366
Uintah Basin Medical Center	41	\$5,596	10	\$8,944
University Health Care	105	\$9,501	92	\$15,202
Utah Valley Regional Medical Center	148	\$9,397	127	\$17,409
Valley View Medical Center	71	\$7,332	36	\$10,081
Veterans Administration Medical Center	74	Not available	67	Not available

[Click here to read Data Limitations.](#)

## Table Legend

< 5 = 1 to 4 patients

## State average hospital length of stay

Minor/Moderate is 3.2 days

Major/Extreme is 4.7 days.

**Level of Illness:** Compared to patients with minor/moderate level of illness, patients with major/extreme level of illness are likely to have more serious conditions that require more complex treatment.

**Average Charge:** The average dollars for hospital services for which patients were billed at a particular hospital. The charge does not include physicians' professional fees or patient personal costs.



# Pneumonia Deaths in Utah Hospitals (IQI 20)

Adults 18 Years and Over: 2004-2006

Hospital	Total Pneumonia Patients	Actual Deaths	Expected Deaths	Statistical Rating
<b>Utah Overall</b>	<b>16,278</b>	<b>3.6%</b>	<b>5.3%</b>	<b>* * *</b>
Alta View Hospital	596	2.5%	6.8%	* * *
Cottonwood Hospital	1,030	3.5%	6.3%	* * *
Fillmore Community Hospital	59	0.0%	2.3%	* * *
LDS Hospital	877	2.2%	6.2%	* * *
Logan Regional Hospital	431	2.6%	5.9%	* * *
McKay-Dee Hospital	1,379	3.8%	5.9%	* * *
Mountain West Hospital	225	1.3%	4.7%	* * *
Ogden Regional Medical Center	605	3.1%	5.4%	* * *
Pioneer Valley Hospital	553	2.4%	4.2%	* * *
San Juan Hospital	75	0.0%	3.3%	* * *
St. Mark's Hospital	1,129	2.7%	5.8%	* * *
University Health Care	1,032	2.3%	5.5%	* * *
Allen Memorial Hospital	73	2.7%	3.5%	**
American Fork Hospital	486	3.3%	4.8%	**
Ashley Regional Medical Center	148	2.0%	3.0%	**

**Most Utah hospitals in this table had about as many deaths as expected compared to similar hospitals in the U.S. Twelve Utah hospitals had fewer than expected. One hospital had more than expected. Hospitals that had no deaths of these patients during this time period also received a three-star rating.**

**The following hospitals treated at least one patient but less than 30 patients:**

Allen Memorial Hospital, Bear River Valley Hospital, Beaver Valley Hospital, Cache Valley Specialty Hospital, Central Valley Hospital, Gunnison Valley Hospital, Heber Valley Hospital, Primary Children's Medical Center, Sanpete Valley Hospital, Sevier Valley Hospital and The Orthopedic Specialty Hospital.

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**Statistical Rating:** based on the Exact 95% Confidence Interval test of statistical significance, except hospitals with no deaths from 2004 through 2006 have three stars. Rating based on small numbers may be unreliable.

\* \* \* Fewer deaths than expected (better)      \*\* Same as expected      \* More deaths than expected

**NOTE:** Hospitals are listed alphabetically within each star rating.

[Click here to read Data Limitations.](#)

**Actual deaths:** percentage of patients who received care for this condition or procedure and died in this hospital.

**Expected deaths:** percentage of patients who were expected to die at this hospital if it performed the same as other U.S. hospitals that treated similar patients (age, gender, how ill the patients were).

# Pneumonia Deaths in Utah Hospitals (IQI 20)

Adults 18 Years and Over: 2004-2006

- CONTINUED -

Hospital	Total Pneumonia Patients	Actual Deaths	Expected Deaths	Statistical Rating
<b>Utah Overall</b>	<b>16,278</b>	<b>3.6%</b>	<b>5.3%</b>	<b>* * *</b>
Bear River Valley Hospital	90	3.3%	3.0%	* *
Beaver Valley Hospital	195	1.0%	3.1%	* *
Brigham City Community Hospital	90	5.6%	4.0%	* *
Castleview Hospital	380	4.2%	4.3%	* *
Central Valley Hospital	126	4.8%	3.5%	* *
Davis Hospital	506	4.7%	3.7%	* *
Delta Community	57	1.8%	2.5%	* *
Dixie Regional Medical Center	1,151	5.2%	5.6%	* *
Garfield Memorial Hospital	113	2.7%	3.3%	* *
Gunnison Valley Hospital	211	1.9%	2.5%	* *
Heber Valley Hospital	100	3.0%	4.9%	* *

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**Statistical Rating:** based on the Exact 95% Confidence Interval test of statistical significance, except hospitals with no deaths from 2004 through 2006 have three stars. Ratings based on small numbers may be unreliable.

\* \* \* Fewer deaths than expected (better)      \* \* Same as expected      \* More deaths than expected

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# Pneumonia Deaths in Utah Hospitals (IQI 20)

Adults 18 Years and Over: 2004-2006

- CONTINUED -

Hospital	Total Pneumonia Patients	Actual Deaths	Expected Deaths	Statistical Rating
<b>Utah Overall</b>	<b>16,278</b>	<b>3.6%</b>	<b>5.3%</b>	<b>***</b>
Jordan Valley Hospital	551	3.1%	4.3%	**
Kane County Hospital	135	1.5%	3.5%	**
Lakeview Hospital	578	5.7%	6.3%	**
Mountain View Hospital	345	3.2%	4.0%	**
Salt Lake Regional Medical Center	318	2.5%	4.5%	**
Sanpete Valley Hospital	133	2.3%	3.0%	**
Sevier Valley Hospital	212	2.4%	3.1%	**
Timpanogos Regional Hospital	309	4.5%	5.3%	**
Utah Valley Regional Medical Center	1,045	6.3%	6.6%	**
Valley View Hospital	293	2.7%	3.3%	**
Veterans Administration Medical Center	475	6.7%	8.0%	**
Uintah Basin Hospital	148	5.4%	2.1%	*

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