
OREGON HOSPITAL QUALITY INDICATOR PROJECT, 2004

HEART BYPASS SURGERY (CORONARY ARTERY BYPASS GRAFT/CABG)

What is a Coronary Artery Bypass Graft?*

Coronary artery bypass graft (CABG) surgery creates new routes around a portion of an artery that has been narrowed or blocked by plaque buildup (atherosclerosis). The **blocked portion of the artery is bypassed** using a blood vessel taken from elsewhere in the body (usually the chest or leg). Blood is redirected through the new blood vessel, restoring blood flow to the affected portion of the heart muscle. Coronary artery bypass surgery is a common **treatment for coronary artery disease**. See Healthwise for additional information on [CABG – Coronary Artery Disease](#) or [CABG – Heart Attack](#).

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What do these indicators mean?

Volume. The **number of patients** who had a coronary artery bypass graft (CABG) is displayed as the **volume**. CABG is highly specialized, and staff at hospitals that perform more of these surgeries may be more familiar with possible complications that can occur. Therefore, **performing more of these surgeries may lead to better outcomes**. Volume is not a direct measure of the quality of care, but is useful in gauging how much experience a particular hospital has for this procedure.

Research indicates that performing **at least 200 surgeries per year** may lead to better patient outcomes. In Oregon, eleven hospitals performed at least one CABG in 2004, and seven hospitals performed 200 or more.

Death Rate. The CABG death rate is the **percent of patients admitted for CABG who died in the hospital**. However, some patients are sicker or more difficult to treat, and some hospitals admit more of these complex patients than others. Each hospital's death rate is adjusted to help account for differences in these factors, but keep in mind that the adjustment is not perfect. The **adjusted death rate** is presented in the displays that follow. The average death rate for CABG in the United States was 2.9% in 2002. In Oregon, the death rate was 3.4% in 2004. This report uses the statewide average as the reference rate.

Margin of Error

Gray lines are displayed with each hospital rate. These lines represent the amount of random variation or "noise" in the data. If the gray line crosses the state average, the hospital rate is "within the margin of error" and therefore **not** statistically different than the state average for this procedure. The margin of error is wider for hospitals with fewer CABG patients.

What do the symbols mean?

The symbols on this chart tell you which differences are large enough to be considered "statistically significant," or outside the "margin of error". Statistical differences are based on the margin of errors described above.

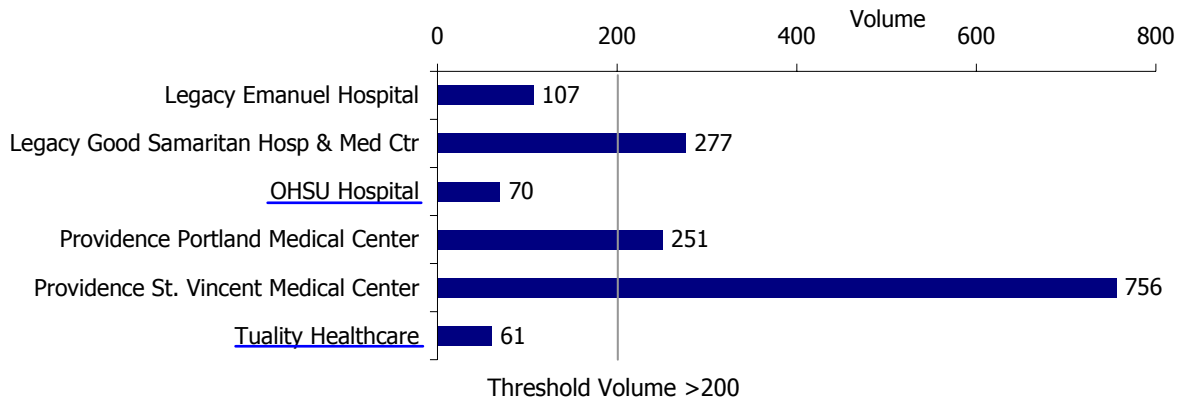
- If a hospital's rate is significantly **lower** than the state average, it gets a plus symbol ⊕
- If a hospital's rate is significantly **higher** than the state average, it gets a cross symbol ⊗
- If a hospital's rate is statistically **neither higher nor lower** than the state average (within the margin of error), **no symbol** is shown.

Coronary Artery Bypass Graft (CABG) Volume Oregon, 2004

Notes

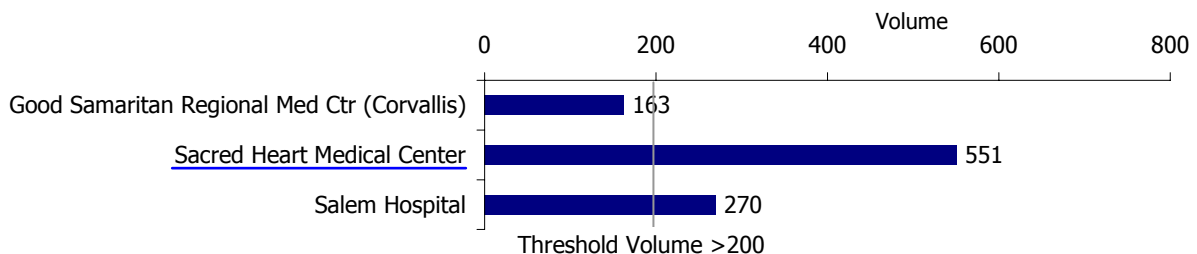
- Hospitals not shown performed fewer than 5 of these procedures in 2004.
- Applies to adults 40 years of age and older.
- Statewide Coronary Artery Bypass Graft (CABG) volume was 3,253 in 2004
- See [Technical Documentation](#) for more detail
- Hospitals that submitted additional information about their volume are underlined; click on the hospital name to access their comments.
- The Agency for Healthcare Research and Quality indicates that performing more than 200 cases per year may lead to better outcomes.

Portland Metropolitan Area (Clackamas, Multnomah, Washington, and Yamhill Counties)



Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Hospitals not shown had less than 5 cases in the reporting year.

Valley (Benton, Lane, Linn, Marion, Polk Counties)

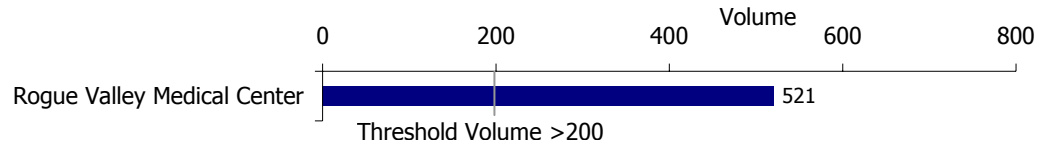


Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Hospitals not shown had less than 5 cases in the reporting year.

Coronary Artery Bypass Graft (CABG) Volume Oregon, 2004

South Coast/Southwest Oregon

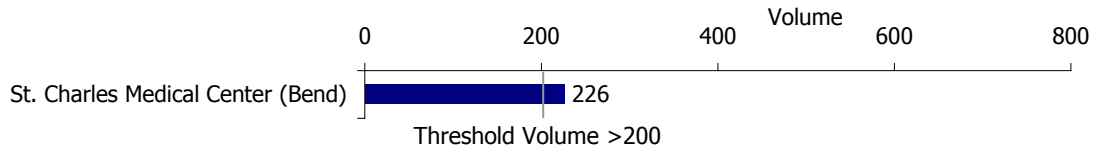
(Coos, Curry, Douglas, Jackson, and Josephine Counties)



Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Hospitals not shown had less than 5 cases in the reporting year.

Central Oregon/Gorge

(Crook, Deschutes, Hood River, Jefferson, Morrow, Umatilla, Wasco Counties)

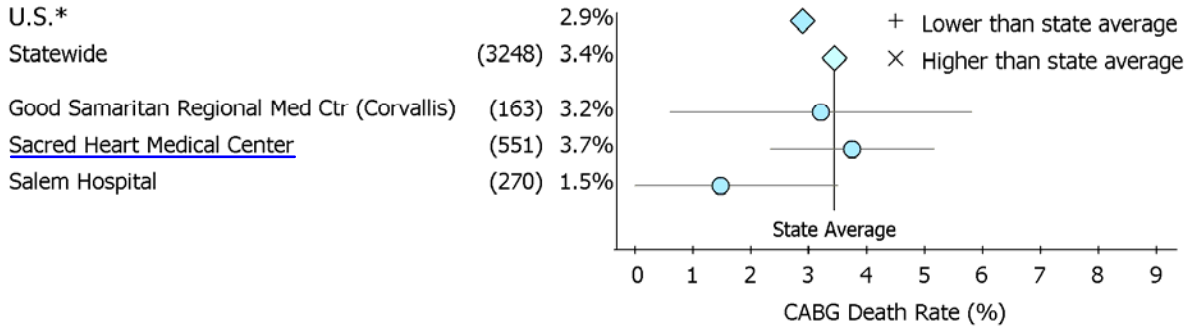


Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Hospitals not shown had less than 5 cases in the reporting year.

Coronary Artery Bypass Graft (CABG) Death Rate Oregon, 2004

Valley

(Benton, Lane, Linn, Marion, Polk Counties)

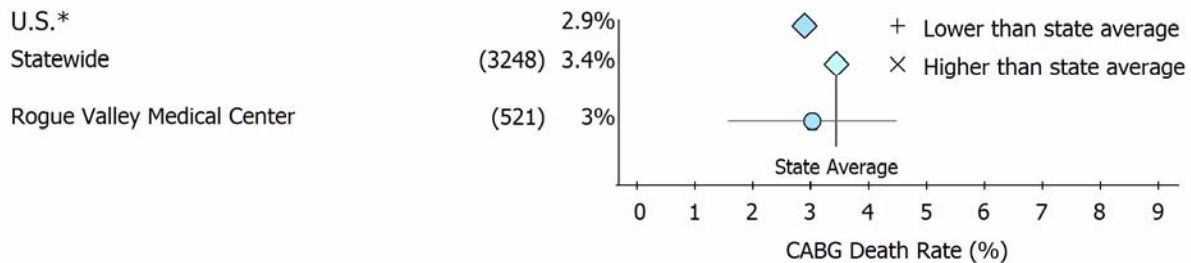


*National rate is for 2002

Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Number of cases in parentheses. Hospitals not shown had fewer than 30 cases in the reporting year. Gray lines represent the margin of error (based on 95% confidence intervals)

South Coast/Southwest Oregon

(Coos, Curry, Douglas, Jackson, and Josephine Counties)



*National rate is for 2002

Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Number of cases in parentheses. Hospitals not shown had fewer than 30 cases in the reporting year. Gray lines represent the margin of error (based on 95% confidence intervals)

Coronary Artery Bypass Graft (CABG) Death Rate Oregon, 2004

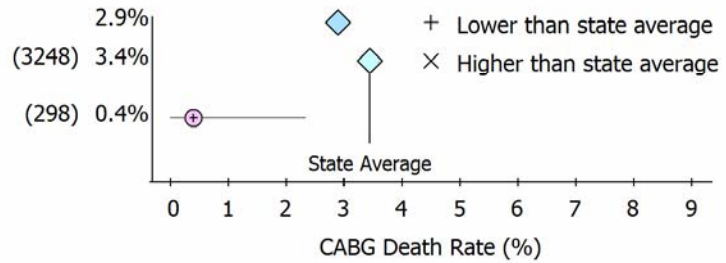
Central Oregon/Gorge

(Crook, Deschutes, Hood River, Jefferson, Morrow, Umatilla, Wasco Counties)

U.S.*

Statewide

St. Charles Medical Center (Bend)



*National rate is for 2002

Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments.

Number of cases in parentheses. Hospitals not shown had fewer than 30 cases in the reporting year.

Gray lines represent the margin of error (based on 95% confidence intervals)