

Abdominal Aortic Aneurysm (AAA) Repair

What is Abdominal Aortic Aneurysm Repair?*

An **aortic aneurysm** is a stretched and bulging section in the wall of the aorta. The aorta is the large blood vessel that carries oxygen-rich blood from the heart to the rest of the body. A bulging aorta is weakened and can burst, or rupture, resulting in life-threatening bleeding. Ruptured aortic aneurysm is the 15th leading cause of death in the United States and occurs in 1 of 20 older men.

The **two types** of aortic aneurysms are **abdominal** aortic aneurysm and **thoracic** aortic aneurysm. This classification is based on where the aneurysm occurs along the aorta. The **abdominal section** of the aorta continues through the abdomen and supplies oxygen-rich blood to the lower body. Surgery can repair the weakened wall of the aorta before it bursts, called **abdominal aortic aneurysm (AAA) repair**.

See Healthwise for additional information on [aortic aneurysms](#).

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What do these indicators mean?

Volume. The **number of patients** who underwent Abdominal Aortic Aneurysm (AAA) repair is displayed as the **volume**. AAA repair 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 32 surgeries per year** may lead to better patient outcomes. In Oregon, twenty-four hospitals performed at least one AAA repair in 2004, and one hospital performed 32 or more.

Death Rate. The AAA repair death rate is the **percent of patients admitted for AAA repair 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 AAA repair in the United States was 10.5% in 2002. In Oregon, the death rate was 11.3% 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 AAA repair 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.

- x If a hospital’s rate is significantly **lower** than the state average, it gets a plus symbol †
- x If a hospital’s rate is significantly **higher** than the state average, it gets a cross symbol ...
- x If a hospital’s rate is statistically **neither higher nor lower** than the

state average (within the margin of error), **no symbol** is shown.

Technology and Changing Practices

In recent years, standard clinical practices have changed due to advancements in surgical technology. “Minimally invasive” techniques have been developed using stents that can be guided to the site of the aneurysm without cutting open the abdomen. For more information, talk to your physician.

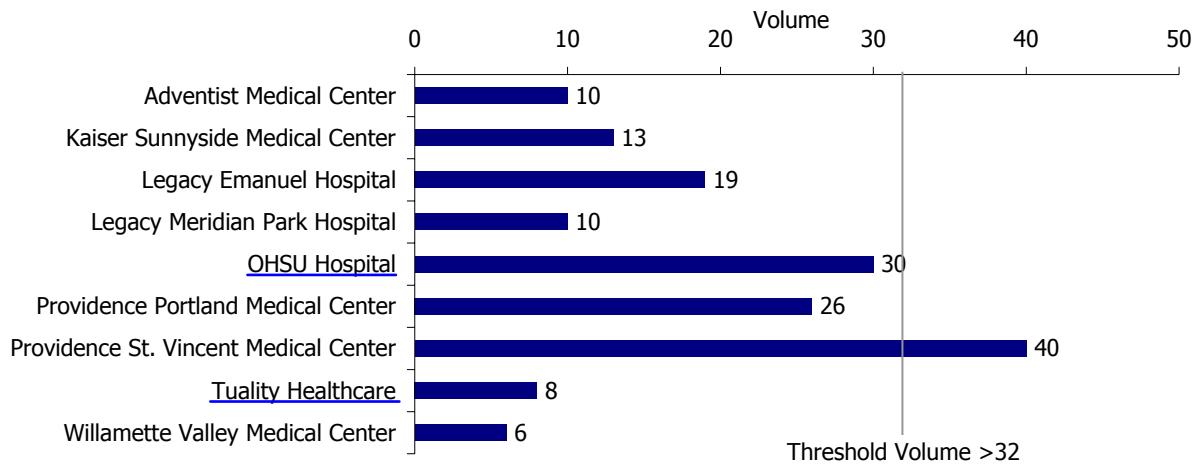
Abdominal Aortic Aneurysm (AAA) Repair Volume Oregon, 2004

Notes

- Hospitals not shown had fewer than 5 of these procedures in 2004.
- Statewide Abdominal Aortic Aneurysm (AAA) Repair volume was 251 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 32 cases per year may lead to better outcomes.

Portland Metropolitan Area

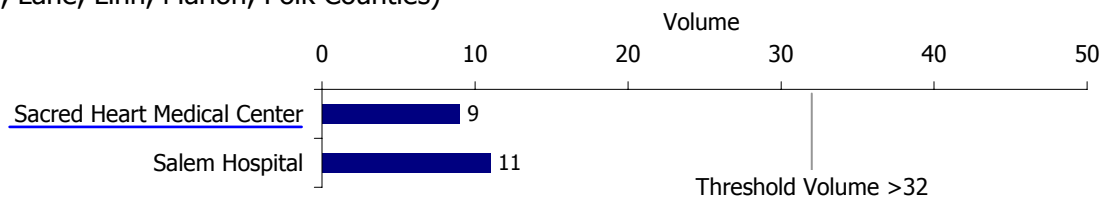
(Clackamas, Multnomah, Washington, and Yamhill Counties)



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

Valley

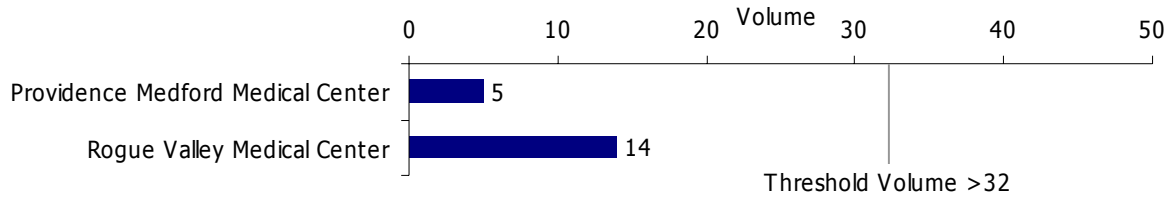
(Benton, Lane, Linn, Marion, Polk Counties)



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

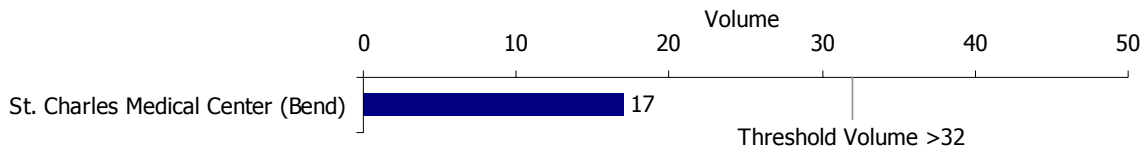
Abdominal Aortic Aneurysm (AAA) Repair Volume Oregon, 2004

South Coast/Southwest Oregon (Coos, Curry, Douglas, Jackson, and Josephine Counties)



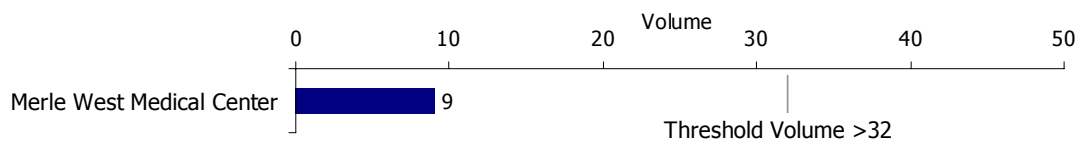
Underline indicates that hospital-submitted comments are available. Click on hospital name to access comments. Hospitals not shown had fewer than 5 cases in the reporting year.

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 fewer than 5 cases in the reporting year.

Eastern/South Central Oregon (Baker, Grant, Harney, Klamath, Lake, Malheur, Union, Wallowa Counties)



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

Abdominal Aortic Aneurysm (AAA) Repair Death Rate Oregon, 2004

The symbols on this chart tell you which differences are outside the margin of error:

⊕ Lower than the state average

⊗ Higher than the state average

No symbol The hospital's rate is **within the margin of error** and therefore not statistically different than the state average for this condition

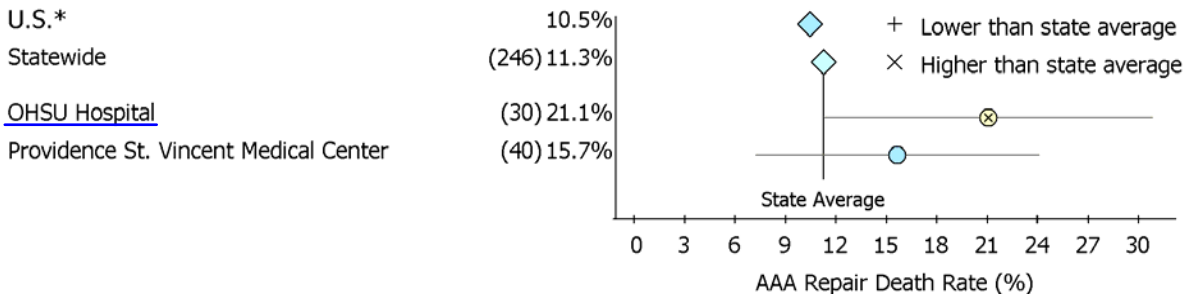
Additional Notes

- Number of AAA repairs appears in parentheses. Hospitals not shown performed fewer than 30 of these procedures in 2004.
- Rates have been adjusted for age, sex, and Risk of death
- See [Technical Documentation](#) for more detail
- Hospitals that submitted additional information about their death rates are underlined; click on the hospital name to access their comments.
- Lower rates may represent better quality.

Hospitals performing thirty or more abdominal aortic aneurysm repairs were all located in the Portland Metropolitan Area.

Portland Metropolitan Area

(Clackamas, Multnomah, Washington, and Yamhill 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)