Health Care Access

Out-of-hospital cardiac arrest survival

Each year, about 300,000 persons in the United States experience an out-of-hospital cardiac arrest (OHCA) or sudden death due to heart disease, trauma, drowning or other causes. OHCA’s from all causes have a mortality rate of approximately 92%. In Oregon, an estimated 2,000 individuals experienced OHCA in 2014.

The CDC’s Cardiac Arrest Registry to Enhance Survival (CARES) captured about half of the OHCA’s in Oregon in 2014. Of the 1,016 reported cases of OHCA in Oregon, 84% were thought to be due to a primary cardiac cause such as heart attack. These patients are the most likely to respond to cardiopulmonary resuscitation (CPR) or defibrillation and are thus more likely to survive an OHCA event.

Utstein Survival is a nationally comparable measure of survival from OHCA and is a proxy indicator for the quality of the EMS system. In 2014 the Oregon Utstein Survival was 37% (Figure 1). The lowest and highest reported state rates were 10% and 70%, respectively.

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1 Defined as survival to hospital discharge and includes only bystander witnessed cardiac arrests with an initial shockable cardiac rhythm.

Notes: Does not include arrests with non-cardiac cause  
Source: CDC Cardiac Arrest Registry to Enhance Survival (CARES)
Early initiation of CPR and defibrillation improve OHCA survival rates. The rate of bystander initiated CPR in Oregon was 55% in 2014, compared to 41% nationwide (Figure 2).

Future efforts should focus on improving the Oregon Utstein Survival to 60% by increasing rates of bystander CPR and promoting the use of early defibrillation by lay and professional rescuers.

**Additional Resources:** CARES Summary Report 2014

**About the Data:** Data source is the Cardiac Arrest Registry to Enhance Survival (CARES). In 2004, the Center for Disease Control and Prevention (CDC) collaborated with Emory University to develop CARES, an OHCA surveillance registry to help communities increase survival rates. To date, over 143,000 cases have been entered into the registry. The registry captures out-of-hospital cardiac arrest where resuscitation is attempted by a 911 responder (CPR and/or defibrillation). It contains demographic, therapeutic, and outcome measures for OHCA. CARES data are used to help communities benchmark and improve their performance for OHCA care. State-level data includes only participating agencies in each state.

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**Date Updated:** June 1, 2015

Oregon State Health Profile
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