

## Heart Attack Mortality

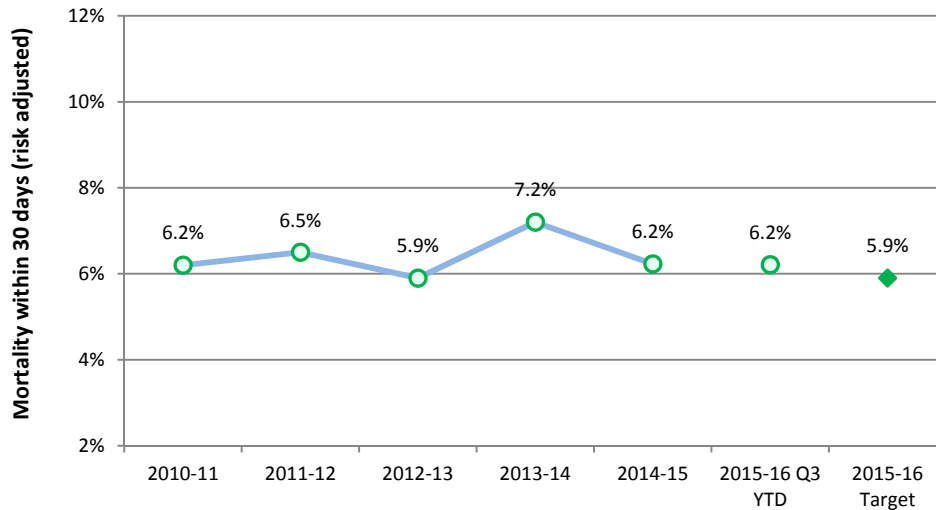
### Measure Definition

The probability of dying in hospital within 30 days of being admitted for a heart attack. This measure represents hospital deaths occurring within 30 days of first admission to a hospital with a diagnosis of acute myocardial infarction (AMI), often called a heart attack. This measure is adjusted for age, sex and other conditions.

### Understanding this Measure

Heart attacks are one of the leading causes of death in Canada. Breakthroughs in treatments, particularly the timing of re-opening coronary arteries for blood flow, are greatly increasing survival rates. NOTE: This measure relies on patient follow up after a patient's original discharge date for a period up to 90 days. Therefore reporting results reflect patients discharged in an earlier time period (i.e., Q3 YTD).

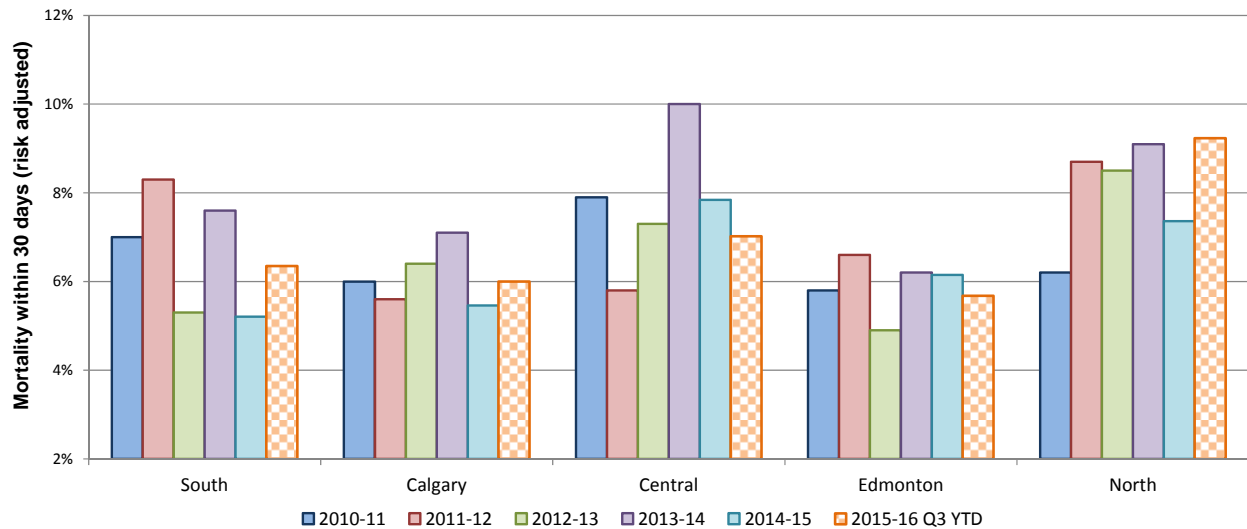
### Heart Attack Mortality - Annual



### How Do We Compare?

Alberta ranked 4<sup>th</sup> best nationally out of ten provinces and the same as the national rate.

### Heart Attack Mortality - by Zone



## Heart Attack Mortality – Actions

<b>Provincial/ Strategic Clinical Network (SCN)</b>	<ul style="list-style-type: none"> <li>Provincial implementation of ST-segment elevation myocardial infarction (STEMI) standardized orders sets with Cardiovascular Health and Stroke SCN.</li> <li>Sites have specific plans to address heart attack mortality including public education and awareness about the signs of a heart attack, ensuring that standard clinical pathways and medication administration guidelines are in place at all sites, and training rural ED registered nursing staff to the current Heart and Stroke ACLS (Advanced Cardiac Life Support) standards.</li> </ul>
<b>South</b>	<ul style="list-style-type: none"> <li>Monitor and evaluate implementation of best practice guideline for NSTEMI.</li> </ul>
<b>Calgary</b>	<ul style="list-style-type: none"> <li>Ongoing implementation of best practice guidelines and protocols and monitoring cardiac outcomes.</li> <li>Completed the Cardiac Services Review in conjunction with the Cardiovascular Health and Stroke SCN.</li> <li>Ongoing efforts in cardiac sciences care pathways and monitoring of the mortality rates continue.</li> </ul>
<b>Central</b>	<ul style="list-style-type: none"> <li>Worked with the Cardiovascular Health and Stroke SCN to develop a provincial dashboard to track mortality metrics in a more effective and accurate way.</li> </ul>
<b>Edmonton</b>	<ul style="list-style-type: none"> <li>ED STEMI is being prepared for roll out in Q1 2016-17.</li> <li>192 patients have been enrolled in the REMCON STEMI research study; recruitment of patients to the study will continue.</li> <li>Ongoing education related to STEMI care was provided to over 450 individuals bringing the year-to-date total to 588 students and staff through a mixture of class lectures and two multi-zone symposiums.</li> <li>Supporting EMS learning and development teams to deliver face-to-face simulation style education sessions with front-line staff to reinforce STEMI diagnosis and care pathway is ongoing.</li> </ul>
<b>North</b>	<ul style="list-style-type: none"> <li>Survey circulated to assess utilization of chest pain high risk stratification scoring tools.</li> </ul>

### IN SUMMARY

Compared to the same period last year, two zones have demonstrated improvement. Two zones have also achieved 2015-16 target.

Every day at AHS, cardiologists and EMS work collaboratively to diagnose patients who are in transit to the hospital. They can jump into action immediately upon the patient's arrival to the ED to initiate an appropriate treatment plan.

The decline in heart attack mortality rates is attributed to medical advances, new pharmaceuticals, and reductions in major risk factors, such as a decline in tobacco use.

### DID YOU KNOW

**NSTEMI (Non-ST-segment elevation myocardial infarction)** occurs by developing a complete blockage of a minor coronary artery or a partial blockage of a major coronary artery previously affected by atherosclerosis.

**STEMI (ST-segment elevation myocardial infarction)** occurs by developing a complete blockage of a major coronary artery previously affected by atherosclerosis.

*NSTEMI and STEMI are both commonly known as heart attack.*

## Heart Attack Mortality – Zone Details

The probability of dying in hospital within 30 days of being admitted for a heart attack. AHS is performing at the same level as the national average of 7.1%. This measure represents hospital deaths occurring within 30 days of first admission to a hospital with a diagnosis of acute myocardial infarction (AMI), often called a heart attack. This measure is risk adjusted for age, sex and other conditions.

Heart Attack (AMI) Mortality within 30 days	2012-13	2013-14	2014-15	Q3 YTD		Trend *	2015-16 Target
				2014-15 Last Year	2015-16 Current		
<b>Provincial</b>	<b>5.9%</b>	<b>7.2%</b>	<b>6.2%</b>	<b>6.1%</b>	<b>6.2%</b>	↓	<b>5.9%</b>
South Zone	5.3%	7.6%	6.4%	5.2%	6.4%	↓	5.3%
Calgary Zone	6.4%	7.1%	4.9%	5.5%	6.0%	↓	6.3%
Central Zone	7.3%	10.0%	7.2%	7.8%	7.0%	↑	7.1%
Edmonton Zone	4.9%	6.2%	6.8%	6.1%	5.7%	↑	4.9%
North Zone	8.5%	9.1%	7.2%	7.4%	9.2%	↓	8.2%

**Note:** Risk adjusted rate of in-hospital death within 30 days for first admission to hospital for a heart attack diagnosis.

\* **Trend:** ↑ Improvement → Stability ↓ Area requires additional focus

Heart Attack Cases (Index)*	2012-13	2013-14	2014-15	Q3 YTD	
				2014-15 Last Year	2015-16 Current
<b>Provincial</b>	<b>5,337</b>	<b>5,475</b>	<b>5,408</b>	<b>4,117</b>	<b>4,044</b>
South Zone	360	320	315	241	218
Calgary Zone	1,794	1,951	1,876	1,417	1,418
Central Zone	542	509	544	398	378
Edmonton Zone	2,283	2,334	2,304	1,774	1,761
North Zone	356	361	369	287	269

\*Total number of hospital stays where a first heart attack was diagnosed.