

## Hospital Mortality

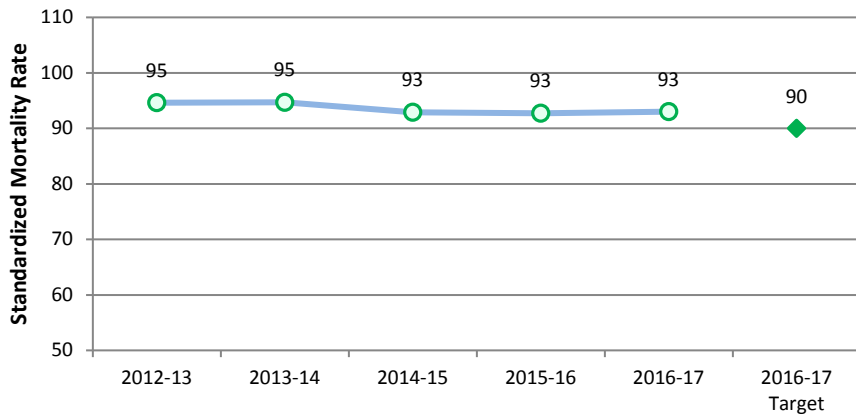
### Measure Definition

The ratio of actual number of deaths compared to the expected number of deaths based upon the type of patients admitted to hospitals. This ratio is multiplied by 100 for reporting purposes. The ratio compares actual deaths to expected deaths after adjusting for factors that affect in-hospital mortality, such as patient age, sex, diagnosis and other conditions. The expected deaths are based on comparison to similar patients in national databases.

### Understanding this Measure

This measure of quality care shows how successful hospitals have been in reducing patient deaths and improving patient care. A mortality ratio equal to 100 suggests that there is no difference between the hospital's mortality rate and the overall average rate. A mortality ratio greater than 100 suggests that the local mortality rate is higher than the overall average. A mortality ratio less than 100 suggests that the local mortality rate is lower than the overall average.

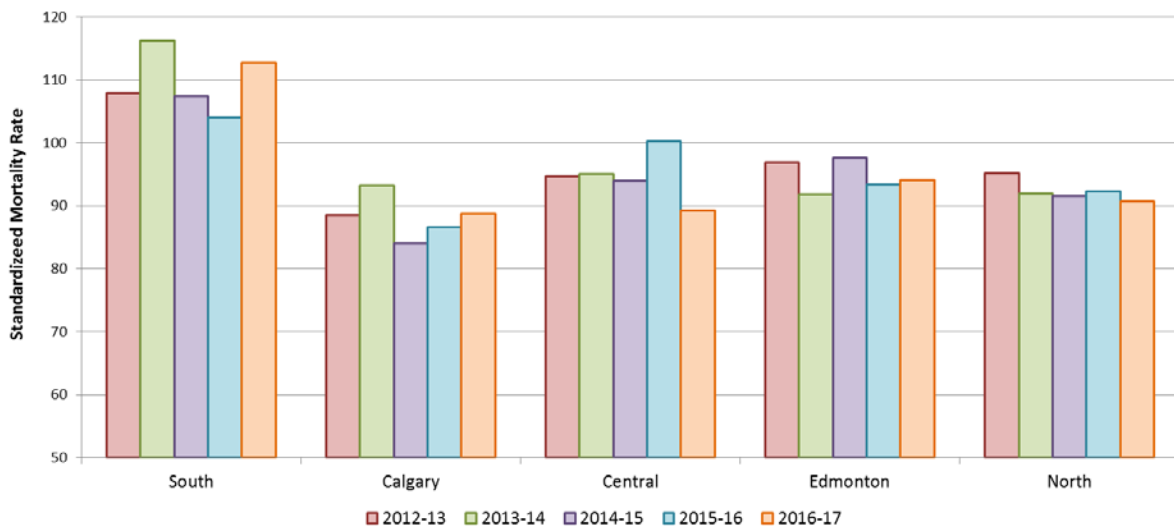
**Hospital Standardized Mortality Rate - Annual**



### How Do We Compare?

Alberta ranked 5<sup>th</sup> nationally out of 9 provinces. Alberta is performing the same as the national rate in 2015-16.

**Hospital Standardized Mortality Rate - Zone**



## Hospital Mortality

### HIGHLIGHTS

Being one provincewide healthcare system care requires everyone involved in the patient's care to work as a team. Using an integrated approach with every patient, will improve the overall health of the community, one person at a time.

Our Strategic Clinical Networks (SCNs) allow us to standardize care through the development of clinical care pathways to ensure all Albertans receive the best care regardless where they live. For example, in the Fragility and Stability Program, the Bone and Joint Health SCN developed the hip fracture acute care pathway which helps reduce hospital mortality in orthopedics – e.g., getting patients to the operating room within 48 hours significantly reduces postoperative mortality. The Surgery SCN worked with the zones to implement the Enhanced Recovery After Surgery (ERAS) program, which standardizes care before, during and after surgery to get patients back on their feet quicker while shortening hospital stays and reducing complications after surgery. This began with one pathway (colon/rectal cancer) at two sites, then 10 pathways at 16 sites and now spreading to over 50 sites.

Zones have implemented several strategies proven to reduce mortality, including, but not limited to, multidisciplinary rounds, Rapid Response Teams, and the Ventilator Bundle (a group of interventions designed to improve care of patients on ventilators). Use of these strategies reduces the number of “code calls” — that is, “code blue,” cardiopulmonary arrest — per thousand discharges and the incidence of ventilator-associated pneumonia. Mortality can be consistently reduced through the use of a combination of evidence-based interventions.

Zones continue to implement infection, prevention and control and hand hygiene initiatives to reduce *Clostridium difficile* infections (CDI) and other infection rates.

### SUMMARY OF RESULTS

Central Zone met target again for Q4 YTD, and North Zone is performing better than the same period as last year. Provincial and two zones remain stable. South Zone deteriorated from the same period as last year.

Trending hospital mortality results for several years has proven very useful: stable reporting year after year helps show how our hospital mortality has changed in relation to our quality improvement efforts — where we've made progress and where we can continue to improve.

This measure shows high sensitivity to variation in number of deaths from quarter to quarter. Working on understanding root cause if present with cases.

In monitoring these measures at a site level, it is important to examine trends over time. We expect there to be fluctuations in hospitals due to smaller sites having low number of discharges and therefore more susceptible to variations. AHS monitors these fluctuations to see if deterioration in performance represents a trend over time or part of expected variation. The fluctuation is within normal range.

## Hospital Mortality

The ratio of actual number of deaths compared to the expected number of deaths based upon the type of patients admitted to hospitals. This ratio is multiplied by 100 for reporting purposes.

Hospital Standardized Mortality Rate	2013-14	2014-15	2015-16	Q4 YTD		Trend	2016-17 Target
				2015-16 Last Year	2016-17 Current		
<b>Trend: ★ Target Achieved; ✓ Improving; ⇔ Stable; ✖ Performance not improving</b>							
<b>Provincial</b>	<b>95</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>	⇔	<b>90</b>
<b>South Zone Total</b>	<b>116</b>	<b>107</b>	<b>104</b>	<b>104</b>	<b>113</b>	✖	<b>102</b>
Chinook Regional Hospital	123	106	106	106	116	✖	97
Medicine Hat Regional Hospital	118	109	111	111	122	✖	105
All Other Hospitals	104	110	94	94	98	★	105
<b>Calgary Zone Total</b>	<b>93</b>	<b>84</b>	<b>87</b>	<b>87</b>	<b>89</b>	⇔	<b>78</b>
Foothills Medical Centre	97	92	94	94	92	✓	80
Peter Lougheed Centre	86	83	84	84	97	✖	80
Rockyview General Hospital	91	74	78	78	86	✖	74
South Health Campus	N/A	74	75	75	65	★	74
All Other Hospitals	102	93	91	91	102	✖	85
<b>Central Zone Total</b>	<b>95</b>	<b>94</b>	<b>100</b>	<b>100</b>	<b>89</b>	★	<b>90</b>
Red Deer Regional Hospital Centre	100	96	99	99	81	★	93
All Other Hospitals	92	93	101	101	94	✓	89
<b>Edmonton Zone Total</b>	<b>92</b>	<b>98</b>	<b>93</b>	<b>93</b>	<b>94</b>	⇔	<b>91</b>
Grey Nuns Community Hospital	90	94	87	87	89	⇔	88
Misericordia Community Hospital	89	108	90	90	99	✖	95
Royal Alexandra Hospital	92	98	92	92	95	✖	92
Sturgeon Community Hospital	94	81	91	91	92	⇔	79
University of Alberta Hospital	94	101	102	102	98	✓	94
All Other Hospitals	82	86	76	76	69	★	87
<b>North Zone Total</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>92</b>	<b>91</b>	✓	<b>88</b>
Northern Lights Regional Health Centre	72	40	88	88	48	★	85
Queen Elizabeth II Hospital	83	93	98	98	99	⇔	93
All Other Hospitals	96	96	91	91	92	⇔	88

N/A: No results available - South Health Campus opened February 2013.

\* "Stable" trend indicates when current period performance is ≤ 3% from the same time period as last year.

Eligible Cases	2013-14	2014-15	2015-16	Q4 YTD	
				2015-16 Last Year	2016-17 Current
<b>Provincial</b>	<b>99,583</b>	<b>102,378</b>	<b>103,537</b>	<b>103,537</b>	<b>104,284</b>
South Zone	8,154	8,321	8,148	8,148	8,538
Calgary Zone	32,933	34,027	34,624	34,624	34,718
Central Zone	12,400	12,945	12,848	12,848	13,069
Edmonton Zone	35,407	36,086	37,250	37,250	37,405
North Zone	10,689	10,999	10,667	10,667	10,554