

# Tri-State Ambulance Delivers “High Performance” Emergency Medical Services to the Coulee Region

High Performance emergency medical services (EMS) is defined as<sup>1, 2</sup> the simultaneous achievement of:

- Clinical Sophistication
- Response Time Reliability
- Economic Efficiency

## ***Does Tri-State Ambulance meet the definition of a “High Performance” EMS provider?***

Tri-State Ambulance meets or exceeds these criteria in the following ways:

### **Clinical Sophistication**

- Dual paramedic ambulances staffed by paramedics certified by the National Registry of EMTs, and the States of Wisconsin and Minnesota
- Paramedic:Patient encounter ratio two times better than the national average
- A cardiac arrest survival rate three times better than the national average
- An average paramedic patient care experience level of 6,400 patient encounters
- Paramedics are authorized to administer enhanced ALS procedures such as Rapid Sequence Induction for Airway Management, Nitroglycerine infusions and numerous controlled medications for pain management
- Externally monitored skills proficiency levels are measured on both a procedural and outcome basis

### **Response Time Reliability**

- Response times measured and reported using “fractile” reliability standard at a 90% confidence interval
- Urban and Suburban average response times are twice as fast as the national average
  - 4 minutes, 32 seconds for urban areas
  - 5 minutes, 8 seconds suburban
- Response time results are published to all stakeholders and on Tri-State’s web site

### **Economic Efficiency**

- No taxpayer subsidy for any community serviced
- An average net patient charge of \$462.16 per transport

The following grid measures the clinical, operational and fiscal performance achieved by Tri-State Ambulance as compared to nationally published reports and studies, with attribution.

There is little published data comparing EMS systems of similar size serviced by Tri-State Ambulance. Consequently, many of the clinical, operational and fiscal comparisons have been derived from the Journal of Emergency Medical Services (JEMS) survey of the 200 largest cities in the United States which is conducted and published annually in JEMS.

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<sup>1</sup> Kuehl, et. al.: Pre-Hospital Systems and Medical Oversight, National Association of EMS Physicians, Mosby Pub. 2006

<sup>2</sup> A Guide to Effective System Design; American Ambulance Association; 2005



## How Does Tri-State Ambulance Compare to National Standards?

Performance Criteria	Tri-State Performance	National Average	Notes
Cardiac Arrest Survival Rate (to hospital discharge)	14.4%	5.2% <sup>1</sup>	Tri-State's cardiac arrest survival rate is nearly 3 times the national average
Cardiac Arrest Cases per Medic/yr	3.08	1.74 <sup>2</sup>	Tri-State's cardiac arrest encounter rate per paramedic is nearly twice the national average
Endotracheal Intubation Success Rate	89%	75% <sup>3</sup>	Tri-State's intubation success rate is 20% higher than the national average
Two paramedics on every 9-1-1 ambulance	100%	36% <sup>4</sup>	Most ambulance configurations are 1 EMT and 1 paramedic
Closest unit sent to every call	100%	55% <sup>4</sup>	45% of top 200 cities in the U.S. do not send the closest unit to an EMS call
Average Response Time – Urban	04:32	08:32 <sup>4</sup>	Tri-State's response times are nearly twice as fast as the national average
Average Response Time – Suburban	05:08	09:37 <sup>4</sup>	Tri-State's response times are nearly twice as fast as the national average
Emergency Medical Dispatch available?	Yes	84% <sup>4</sup>	16% of the largest 200 cities do not offer EMD
Rapid Sequence Induction	Yes	24.0% <sup>4</sup>	Only 24% of the largest 200 cities allow medics to perform RSI
Surgical Cricothyrotomy	Yes	32.3% <sup>4</sup>	Only 32% of the largest 200 cities allow medics to perform Surgical Cricothyrotomy
Analgesics other than morphine	Yes	45.8% <sup>4</sup>	Only 45.8% of the largest 200 cities allow medics to administer analgesics other than Morphine
% of Budget from Public Subsidy	0%	56% <sup>4</sup>	56% of governmental EMS agency's budget comes from a public subsidy
Average Net Patient Charge	\$462.16	\$626.58 <sup>4</sup>	Tri-State's net charges are 27% lower than the national average
Pen-Based electronic patient care reporting in the field	Yes	8.2% <sup>4</sup>	Less than 10% of the EMS systems in the largest 200 cities in country are using the technology Tri-State is using

<sup>1</sup> American Heart Association; *Circulation*. 2005;112:IV-1 – IV-5

<sup>2</sup> ACAD EMERG MED May 2006, Vol. 13, No. 5, Suppl. 1

<sup>3</sup> Wang HE, Yealy DM. Out-of-hospital endotracheal intubation where are we? *Ann Emerg Med* 2006;47:532-41

<sup>4</sup> *Jour Emerg Med Svcs* Feb 2007, 200 City Survey