



*Kansas Board of  
Emergency Medical Services*

**COVERDELL STROKE  
PERFORMANCE MEASURES**

2023

**KANSAS**



# ABOUT

The Paul Coverdell National Acute Stroke Program (Coverdell Program) is a Centers for Disease (CDC) funded program for states to develop comprehensive stroke systems. Through these state funded grants, a list of eight pre-hospital quality performance measures were identified. The goal of these measures is to improve the experience and outcomes of stroke patients while enhancing the communication between EMS and the hospital. This report assesses the performance of EMS in Kansas to National EMS records.



Measure ID	Description	Page
Coverdell-1	On-Scene Time	1
Coverdell-2	Glucose	2
Coverdell-3	Pre-Notification	3
Coverdell-4	Screen	4
Coverdell-5	Last Known Well	5
Coverdell-6	Time of Discovery	6
Coverdell-7	Thrombolytic	7
Coverdell-8	Impression	8

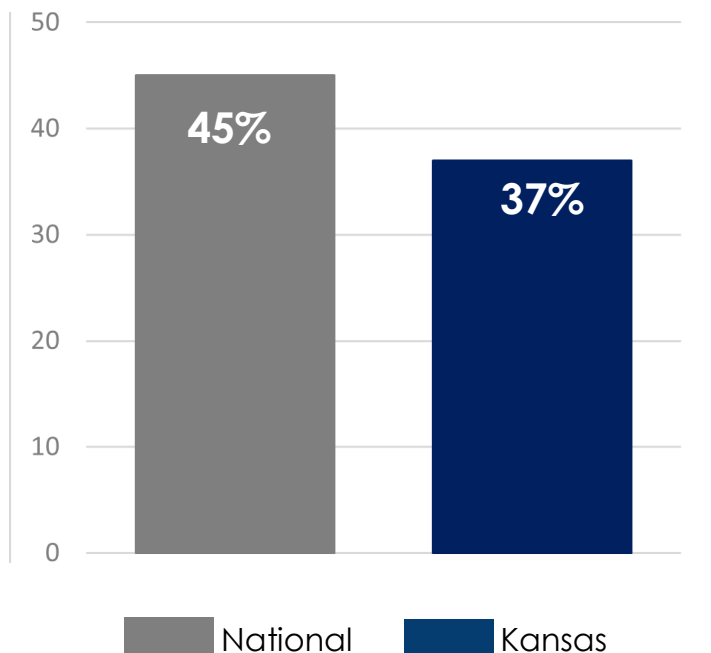
Source: [https://www.cdc.gov/dhosp/programs/stroke\\_registry.htm](https://www.cdc.gov/dhosp/programs/stroke_registry.htm)

Data Source: Biospatial; Incident Date Range 01/01/2022 - 12/31/2022

Data Extracted on 2-14-2024

# ON-SCENE TIME LESS THAN 15 MINUTES

37% of Kansas EMS responses had an on-scene time for stroke patients of less than 15-minutes.



Coverdell 1		
	2022	2023
Kansas	38%	37%
National	45%	45%

Kansas EMS Region Comparison		
Region 1	46%	41%
Region 2	47%	41%
Region 3	24%	23%
Region 4	35%	46%
Region 5	45%	43%
Region 6	35%	42%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

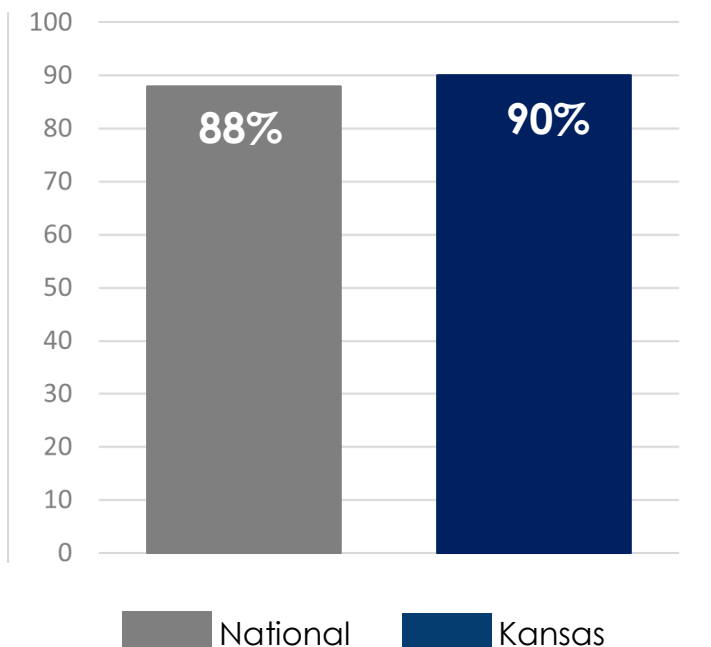
**MEASURE DESCRIPTION:** Percentage of suspected-stroke transports with an on-scene time less than 15-minutes as recommended by the Paul Coverdell National Acute Stroke Program.

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	The difference between unit arrival on scene time (eTimes.06) and the unit left scene time (eTimes.09) is less than 15-minutes
<b>Denominator Statement</b>	All EMS responses originating from a 911 request for patients with a stroke event and patient disposition is Treated, Transported by this EMS Unit.

# BLOOD GLUCOSE CHECKED

**90% of Kansas EMS suspected-stroke transports had their blood glucose level checked.**



Coverdell 2		
	2022	2023
Kansas	85%	90%
National	87%	88%

Kansas EMS Region Comparison		
Region 1	81%	90%
Region 2	72%	92%
Region 3	83%	90%
Region 4	82%	92%
Region 5	88%	90%
Region 6	81%	93%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

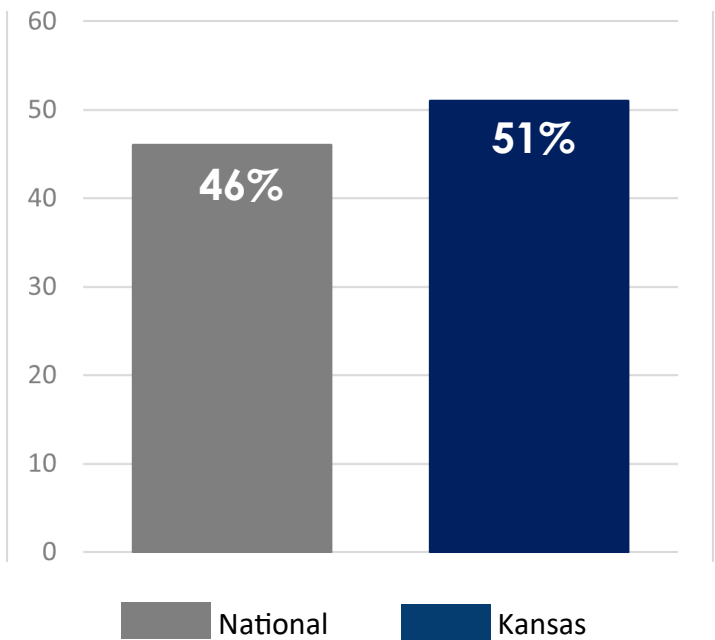
**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected-stroke transports where a blood glucose level was checked.

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	The patient's blood glucose level (eVitals.18) is documented with a valid value.
<b>Denominator Statement</b>	All EMS responses originating from a 911 request for patients with a stroke event and disposition equal to Treated, Transported by this EMS Unit.

# STROKE PRE-NOTIFICATION ALERT CALLED IN BY EMS

51% of Kansas EMS suspected-stroke patients had a destination pre-notification alert called by EMS.



Coverdell 3		
	2022	2023
Kansas	37%	51%
National	43%	46%

Kansas EMS Region Comparison		
Region 1	59%	64%
Region 2	18%	50%
Region 3	49%	58%
Region 4	48%	58%
Region 5	32%	46%
Region 6	30%	50%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

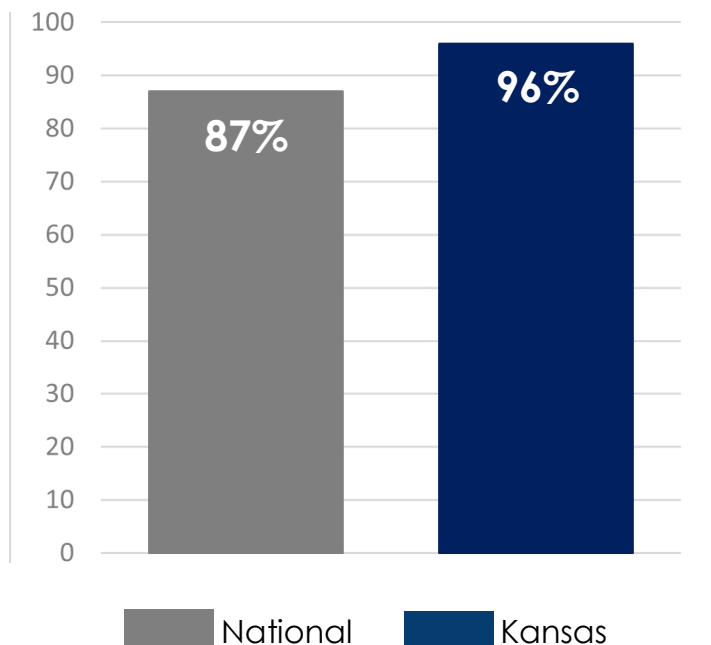
**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected-stroke patient where EMS called a stroke alert pre-notification to the receiving facility.

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patient where a destination team pre-arrival alert or activation indicates stroke team activation.  Destination team pre-arrival alert or activation (eDisposition.24) equals stroke.
<b>Denominator Statement</b>	All EMS responses (eResponse.05) originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.

# STROKE SCREEN COMPLETED AND RECORDED

96% of Kansas EMS suspected-stroke patients had a stroke scale score completed and documented.



Coverdell 4		
	2022	2023
Kansas	91%	96%
National	86%	87%

Kansas EMS Region Comparison		
Region 1	89%	95%
Region 2	77%	97%
Region 3	93%	96%
Region 4	70%	96%
Region 5	95%	96%
Region 6	81%	96%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

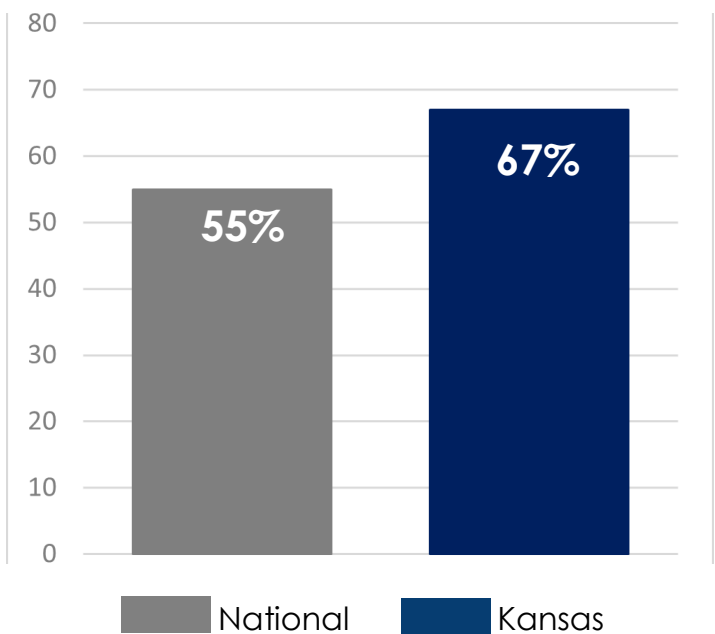
**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected-stroke patients who received a pre-hospital stroke screen

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patients who have a stroke scale score (eVitals.29) documented.
<b>Denominator Statement</b>	All EMS responses (eResponse.05) originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.

# LAST KNOWN WELL TIME DOCUMENTED

**67% of Kansas EMS 911 responses for suspected-stroke patients had a last known well date/time documented.**



Coverdell 5		
	2022	2023
Kansas	50%	67%
National	47%	55%

Kansas EMS Region Comparison		
Region 1	6%	44%
Region 2	15%	60%
Region 3	74%	81%
Region 4	8%	70%
Region 5	49%	61%
Region 6	23%	58%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

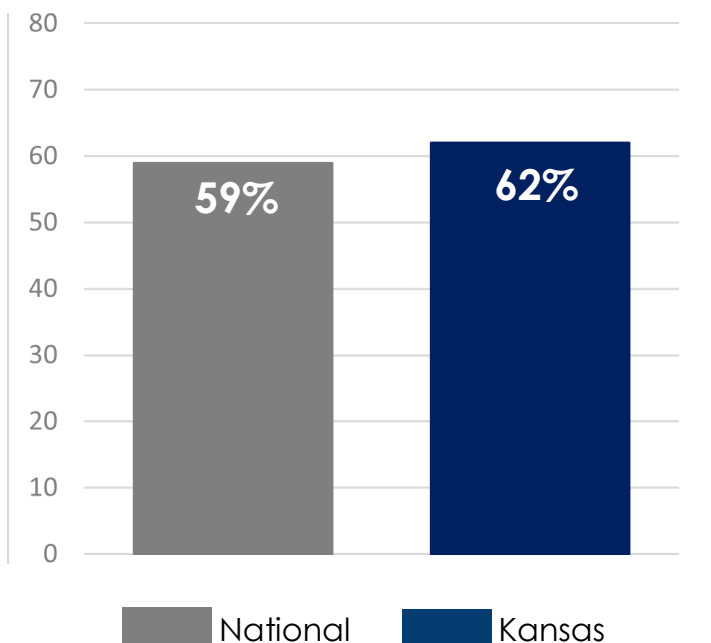
**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected stroke patient who had a last known well date/time documented.

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patients who have a last known well date/time (eSituation.18) documented.
<b>Denominator Statement</b>	All EMS responses (eResponse.05) originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.

## TIME OF DISCOVERY DOCUMENTED

**62% of Kansas EMS patients suffering from a suspected stroke had the time of discovery documented.**



Coverdell 6		
	2022	2023
Kansas	55%	62%
National	60%	59%

Kansas EMS Region Comparison		
Region 1	65%	74%
Region 2	58%	75%
Region 3	46%	66%
Region 4	59%	79%
Region 5	58%	53%
Region 6	61%	77%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected-stroke patients who have a time of discovery documented.

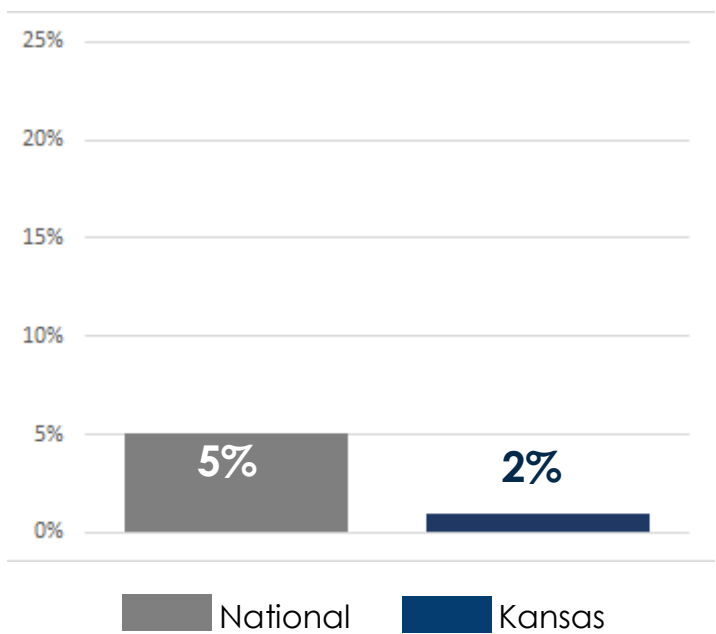
**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patients who had a Date/Time of Symptom Onset (eSituation.01) documented.
<b>Denominator Statement</b>	All EMS responses originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.



# THROMBOLYTIC STROKE CHECK DOCUMENTED

2% of Kansas EMS suspected-stroke patients had a thrombolytic stroke check documented.



Coverdell 7		
	2022	2023
Kansas	1%	2%
National	5%	5%

Kansas EMS Region Comparison		
Region 1	0%	0%
Region 2	0%	0%
Region 3	1%	1%
Region 4	1%	4%
Region 5	1%	1%
Region 6	1%	1%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for suspected-stroke patients who had a thrombolytic screen documented.

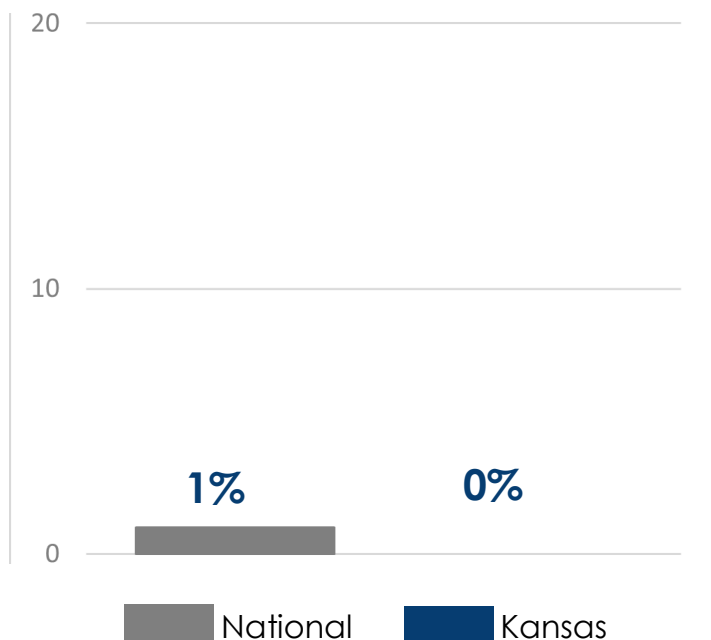
**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patients who had a Reperfusion Checklist (eVitals.31) documented.
<b>Denominator Statement</b>	All EMS responses originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.

\*\*\*Most Thrombolytic Stroke Screens are performed in the hospital.

# EMS PROVIDER IMPRESSION AGREES WITH HOSPITAL DIAGNOSIS

0% of Kansas EMS suspected-stroke patients had the provider impression agree with the hospital diagnosis.



Coverdell 8		
	2022	2023
Kansas	0%	0%
National	0%	1%
<b>Kansas EMS Region Comparison</b>		
Region 1	0%	0%
Region 2	0%	0%
Region 3	0%	1%
Region 4	0%	0%
Region 5	0%	0%
Region 6	0%	0%

**MEASURE SCORE INTERPRETATION:** For this measure, a higher score indicates higher compliance.

**MEASURE DESCRIPTION:** Percentage of EMS responses originating from a 911 request for patients with an impression of stroke where the hospital diagnosis agrees.

**MEASURE COMPONENTS:**

<b>Numerator Statement</b>	EMS responses originating from a 911 request for suspected-stroke patients who had the EMS provider impression that agreed with the hospital diagnosis.
<b>Denominator Statement</b>	All EMS responses originating from a 911 request for suspected-stroke patients with a disposition equal to Treated, Transported by this EMS Unit.

\*\*\*Hospital outcome information is not currently entered into the KEMSIS system on a routine basis.

Special thanks to the Kentucky Board of EMS for allowing us to use their template to edit and publish our performance



Kansas Board of Emergency Medical Services



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