

Cardiac Arrest - Utstein Report

Service: [REDACTED]
 From 2015/10/01 To 2016/03/31

Generated: Wednesday, 11 May 2016 1:05

All Arrests Attended by Service

N	607
Resuscitation attempted by EMS	357 (58.8%)
Obviously dead (legal legislation)	184 (30.3%)
DNR	66 (10.9%)
Unknown	0

New to this report? Please review the primer at the end of this document.

Resuscitation attempted, breakdown by age/etiology

N	357
Pediatric arrests (age <= 11)	8 (2.2%)
Adult arrests, no obvious cause etiology	316 (88.5%)
Adult arrests, trauma or obvious cause etiology	33 (9.2%)
Unknown	0

Resuscitation attempted, breakdown by witnessed/bystander CPR

N	357	Witnessed by bystander	130 (36.4%)
Unwitnessed and no bystander CPR	112 (31.4%)	Bystander CPR	130 (36.4%)
Unwitnessed and bystander CPR	68 (19.0%)	PAD applied	14 (3.9%)
Witnessed by bystander and no bystander CPR	68 (19.0%)	PAD applied and shock delivered	9 (2.5%)
Witnessed by bystander and bystander CPR	62 (17.4%)	CPR instructions given by dispatch	12 (3.4%)
Witnessed by EMS/Fire	47 (13.2%)	AED retrieval recommended by dispatch	0 (0%)
Unknown	0	AED instructions given by dispatch	0 (0%)

Age & etiology, breakdown by presenting rhythm

	N	Pediatric	Adult, no obvious cause	Adult, trauma or obvious cause etiology	Unknown
N	357	8	316	33	0
VF/VT or shockable	72	0 (0%)	71 (22.5%)	1 (3.0%)	0
PEA	84	2 (25.0%)	71 (22.5%)	11 (33.3%)	0
Asystole	169	4 (50.0%)	145 (45.9%)	20 (60.6%)	0
Not shockable	23	2 (25.0%)	21 (6.6%)	0 (0%)	0
Unknown	9	0	8	1	

Witnessed arrest/bystander CPR, breakdown by outcome (for Adult Arrests - No Obv Cause)

	N	Unwitnessed, No Bys CPR	Unwitnessed, Bys CPR	Bys Witnessed, No Bys CPR	Bys Witnessed, Bys CPR	Witnessed by EMS/Fire	Unknown	Bys CPR	Dispatch CPR Instructions	PAD applied
N	316	98	56	59	57	46	0	115 (36.4%)	11 (3.5%)	14 (4.4%)
ROSC prehospital	101 (32.0%)	21 (21.4%)	10 (17.9%)	19 (32.2%)	25 (43.9%)	26 (56.5%)	0	37 (32.2%)	2 (18.2%)	9 (64.3%)
Pronounced at scene	150 (47.5%)	65 (66.3%)	37 (66.1%)	24 (40.7%)	19 (33.3%)	5 (10.9%)	0	56 (48.7%)	9 (81.8%)	2 (14.3%)
Died in hospital	130 (41.1%)	30 (30.6%)	16 (28.6%)	32 (54.2%)	23 (40.4%)	29 (63.0%)	0	40 (34.8%)	2 (18.2%)	6 (42.9%)
Survived to discharge	36 (11.4%)	3 (3.1%)	3 (5.4%)	3 (5.1%)	15 (26.3%)	12 (26.1%)	0	19 (16.5%)	0 (0%)	6 (42.9%)
Unknown Vital Status	0	0	0	0	0	0	0	0	0	0 (0%)

Presenting rhythm, breakdown by outcome (for Adult Arrests - No Obv Cause)

	N	VF/VT or shockable	PEA	Asystole	Not Shockable	Not VF/VT or shockable and shocked >= 1	Unknown
N	316	71	71	145	21	0	8
ROSC prehospital	101 (32.0%)	44 (62.0%)	26 (36.6%)	25 (17.2%)	3 (14.3%)	0	3
Pronounced at scene	150 (47.5%)	7 (9.9%)	27 (38.0%)	99 (68.3%)	12 (57.1%)	0	5
Died in hospital	130 (41.1%)	37 (52.1%)	40 (56.3%)	44 (30.3%)	8 (38.1%)	0	1
Survived to discharge	36 (11.4%)	27 (38.0%)	4 (5.6%)	2 (1.4%)	1 (4.8%)	0	2
Unknown Vital Status	0	0	0	0	0	0	0

Presenting rhythm, breakdown by outcome (for Adult Bystander Witnessed Arrests - No Obv Cause)

	N	VF/VT or shockable	PEA	Asystole	Not Shockable	Not VF/VT or shockable and shocked >= 1	Unknown
N	116	41	23	44	6	0	2
ROSC prehospital	44 (37.9%)	25 (61.0%)	7 (30.4%)	9 (20.5%)	1 (16.7%)	0	2
Pronounced at scene	43 (37.1%)	4 (9.8%)	11 (47.8%)	26 (59.1%)	2 (33.3%)	0	0
Died in hospital	55 (47.4%)	20 (48.8%)	12 (52.2%)	18 (40.9%)	4 (66.7%)	0	1
Survived to discharge	18 (15.5%)	17 (41.5%)	0 (0%)	0 (0%)	0 (0%)	0	1
Unknown Vital Status	0	0	0	0	0	0	0

Presenting rhythm, breakdown by outcome (for Adult, not witnessed by EMS - no obv cause)

	N	VF/VT or shockable	PEA	Asystole	Not Shockable	Not VF/VT or shockable and shocked >= 1	Unknown
N	270	57	47	138	20	0	8
ROSC prehospital	75 (27.8%)	34 (59.6%)	15 (31.9%)	21 (15.2%)	2 (10.0%)	0	3
Pronounced at scene	145 (53.7%)	7 (12.3%)	23 (48.9%)	98 (71.0%)	12 (60.0%)	0	5
Died in hospital	101 (37.4%)	31 (54.4%)	22 (46.8%)	39 (28.3%)	8 (40.0%)	0	1
Survived to discharge	24 (8.9%)	19 (33.3%)	2 (4.3%)	1 (0.7%)	0 (0%)	0	2
Unknown Vital Status	0	0	0	0	0	0	0

Age & etiology, breakdown by outcome

	N	Pediatric	Adult, no obvious cause	Adult, trauma or obvious cause	Unknown
N	357	8	316	33	0
ROSC prehospital	107 (30.0%)	1 (12.5%)	101 (32.0%)	5 (15.2%)	0
Pronounced at scene	168 (47.1%)	1 (12.5%)	150 (47.5%)	17 (51.5%)	0
Died in hospital	152 (42.6%)	6 (75.0%)	130 (41.1%)	16 (48.5%)	0
Survived to discharge	37 (10.4%)	1 (12.5%)	36 (11.4%)	0 (0%)	0
Unknown Vital Status	0	0	0	0	0

Call received at dispatch to 1st vehicle arrival interval, breakdown by outcome {Witnessed by EMS excluded}

	N	0-2	>2-4	>4-6	>6-8	>8-10	>10	Unknown
N	310	3	23	74	99	57	48	6
ROSC prehospital	81	3 (100%)	6 (26.1%)	19 (25.7%)	26 (26.3%)	14 (24.6%)	13 (27.1%)	0
Pronounced at scene	163	0 (0%)	13 (56.5%)	35 (47.3%)	52 (52.5%)	33 (57.9%)	28 (58.3%)	2
Died in hospital	122	2 (66.7%)	8 (34.8%)	30 (40.5%)	38 (38.4%)	22 (38.6%)	18 (37.5%)	4
Survived to discharge	25	1 (33.3%)	2 (8.7%)	9 (12.2%)	9 (9.1%)	2 (3.5%)	2 (4.2%)	0
Unknown Vital Status	0	0	0	0	0	0	0	0

Call received at dispatch to 1st vehicle arrival interval (Witnessed by EMS excluded)

Response intervals

N	0-2	>2-4	>4-6	>6-8	>8-10	>10	Unknown
310	3 (1.0%)	23 (7.4%)	74 (23.9%)	99 (31.9%)	57 (18.4%)	48 (15.5%)	6
Mean	Median	Std Dev	90th %tile				
7.61	7.22	3.34	11.00				

1st Crew notified to 1st vehicle arrival interval (Witnessed by EMS excluded)

Service Response Intervals

N	0-2	>2-4	>4-6	>6-8	>8-10	>10	Unknown
310	12 (3.9%)	53 (17.1%)	94 (30.3%)	95 (30.6%)	34 (11.0%)	16 (5.2%)	6
Mean	Median	Std Dev	90th %tile				
6.10	5.62	2.50	9.00				

Service First on Scene (%) 32.21

CPR Process Summary Stats (for Adult Arrests - No Obv Cause)

	AHA Guidelines-ROC	Minutes of CPR Meeting Standard(%)	Mean	Std Dev	N (recs)	90th %tile	Range	Min	Max
N (Minutes of CPR)		1460							
Compression Rate (comps/min)	100-125	1075 (73.6%)	107.07	11.46	266	120.00	116.00	39.00	155.00
Compression Fraction	≥ 0.60	1313 (89.9%)	0.82	0.10	266	0.93	0.75	0.23	0.98
Compression Depth (cm)	≥ 5.0	889 (60.9%)	5.30	1.09	266	6.59	8.53	2.70	11.23

Interventions (Witnessed by EMS excluded) * **

N	238
Epinephrine given	228 (95.8%)
Amiodarone given	26 (10.9%)
Advanced airway deployed	167 (70.2%)

Intervals	Mean	Median	std Dev	N	90%tile	Range	Min	Max
EMS arrival to IV/IO	9.27	7.53	9.58	234	16.00	123.05	0.30	123.35
EMS pt contact to IV/IO	9.83	8.47	9.45	226	15.00	122.00	1.00	123.00
EMS arrival to advanced airway deployed	15.87	14.00	6.44	164	23.72	38.18	2.53	40.72
ALS arrival to first drug given	9.73	7.62	9.79	226	17.00	123.15	1.20	124.35
ALS pt contact to first drug given	8.10	13.00	9.59	228	15.00	124.00	0.00	124.00
CPR start to any drug given	10.85	9.70	9.77	222	18.02	120.90	2.00	122.90

* : Fire service only reports will show no value for this table.

** : Muskoka region or Muskoka EMS reports will show data only for advanced airway.

ABBREVIATIONS/DEFINITIONS

The term 'no obvious cause' refers to patients who have no obvious external cause for their cardiac arrest. These include most cardiac sudden deaths, and have a better chance of survival. The term 'trauma or obvious cause' includes cardiac arrests who died of obvious mechanisms of injury such as trauma, burns, drowning, or hanging. These are analyzed separately in most cases because of very different treatment approaches and likelihood of survival.

VF/VT - ventricular fibrillation/ventricular tachycardia (rhythms that can sometimes be restored to normal cardiac rhythm with defibrillator shocks).

PEA - pulseless electrical activity; a rhythm is visible on the cardiac monitor but the patient remains in cardiac arrest. Often there is an underlying reason such as blood loss, hypoxia, poisoning, or life-threatening medical illness.

Asystole - no electrical activity on the monitor; often a sign of irreversible death.

ROSC - return of spontaneous circulation; usually refers to the restoration of a pulse in the field, but many of these patients still die because of brain death or severe underlying illness or injuries.

1. SERVICE NAME AND DATE OF REPORT

Reports can be run for all sites, a particular region, or a specific agency, and can be run for any time frame from 2005 to the present (depending on when data contribution began).

2. ALL ARRESTS ATTENDED BY SERVICE

Total number (N) includes treated arrests, and those not treated due to DNR status or obvious death criteria. All subsequent measures are for treated cardiac arrests only (resuscitation attempted by EMS (including Fire agencies)).

3. RESUSCITATION ATTEMPTED, BREAKDOWN BY ETIOLOGY

Breakdown of cardiac arrests into pediatric cases, no obvious etiology (which almost invariably means cardiac), and traumatic and other obvious cause cardiac arrests.

4. RESUSCITATION ATTEMPTED, BREAKDOWN BY WITNESSED/BYSTANDER CPR

Breakdown of treated arrests based on witnessed status, bystander CPR, and public access defibrillator (PAD) use. For the definitions of this report, a bystander includes anyone not part of an organized 911 response (including, but not limited to, lay responders, internal medical response teams, physicians, nursing home staff, and off-duty EMS providers).

CPR and AED instructions is not a consistently captured data point for all regions other than Toronto. Toronto EMS began collection of these variables in

September 2013. Each episode where instructions were not noted are scored as no instructions given. AED retrieval recommended by dispatch includes episodes where dispatch recommended a bystander go and retrieve the AED in the area of the cardiac arrest regardless of whether the dispatcher had prior knowledge that an AED was registered in the vicinity of the call.

5. AGE AND ETIOLOGY, BREAKDOWN BY PRESENTING RHYTHM

Breakdown by presenting rhythm of cardiac arrests. This refers to the earliest rhythm known as determined from an EMS or Fire defibrillator. "Not shockable" is a group that includes both asystole and PEA where insufficient documentation exists to differentiate between the two (for example, a paramedic documents that an analysis yielded a "no shock advised," but the electronic ECG file is not available to determine the actual rhythm).

6. WITNESSED ARREST/BYSTANDER CPR, BREAKDOWN BY OUTCOME

Breakdown of outcome by arrest category as relates to the presence or absence of the arrest being witnessed or receiving bystander CPR. It is important to note that patient discharge data from hospitals takes time to obtain and add to the database, so survivor numbers may not be completely accurate for recent episodes; attention must be given to the number of unknowns, as these are often patients still in hospital.

7. PRESENTING RHYTHM, BREAKDOWN BY OUTCOME (ADULT ARRESTS - NO OBV CAUSE)

Breakdown of outcome based on initial cardiac arrest rhythm for all adult cardiac arrests with no obvious etiology (aka presumed cardiac).

8. PRESENTING RHYTHM, BREAKDOWN BY OUTCOME (FOR ADULT BYSTANDER WITNESSED ARRESTS)

Breakdown of outcome based on initial cardiac arrest rhythm for all adult witnessed cardiac arrests with no obvious etiology.

9. PRESENTING RHYTHM, BREAKDOWN BY OUTCOME (FOR ADULT, NOT WITNESSED BY EMS)

Breakdown of outcome based on initial cardiac arrest rhythm for all adult cardiac arrests with no obvious etiology, excluding EMS witnessed arrests.

10. AGE AND ETIOLOGY, BREAKDOWN BY OUTCOME

Breakdown of outcome by pediatric, adult: no obvious cause, and adult: obvious cause.

11. CALL RECEIVED AT DISPATCH TO FIRST VEHICLE ARRIVAL, BREAKDOWN BY OUTCOME

Breakdown of outcome based on the time interval from call received at dispatch to wheels stopped at scene for the first arriving vehicle. When the report is run by region, first vehicle arrival will be the earliest arriving vehicle from any service. When the report is run by agency, first vehicle arrival will be the earliest arriving vehicle from that particular service. This is a measure of the total time required to process a call and have responders arrive on scene.

12. CALL RECEIVED AT DISPATCH TO FIRST SERVICE ARRIVAL

Breakdown of response interval as measured from first vehicle notified to wheels stopped at scene for the first arriving vehicle. When the report is run by region, first vehicle notified and first vehicle arrival will be the earliest times from any service. When the report is run by agency, first vehicle notified and first vehicle

arrival will be the earliest times from that particular service. This is a measure of drive time.

13. FIRST CREW NOTIFIED TO FIRST VEHICLE ARRIVAL INTERVAL

Breakdown of response interval as measured from first vehicle notified to wheels stopped at scene for the first arriving vehicle. When the report is run by region, first vehicle notified and first vehicle arrival will be the earliest times from any service. When the report is run by agency, first vehicle notified and first vehicle arrival will be the earliest times from that particular service. This is a measure of drive time.

14. SERVICE FIRST ON SCENE

This is the percentage of time that the agency arrives first on scene. Please note that for untreated arrests, and for treated arrests in regions with non-participating fire agencies, fire will be underrepresented in this measure, leading to artificially high numbers for EMS. This is due to lack of documentation from fire agencies for these types of calls.

15. CPR PROCESS SUMMARY STATS

Breakdown of key CPR process measures. Please note that targets may vary depending on the CPR protocol in use during the time of report. In general, per Resuscitation Outcomes Consortium and American Heart Association targets, rate should be between 100 and 125 compressions per minute, compression fraction should be greater than 0.60 (or greater than 0.75 for continuous compressions), and depth should be greater than 5cm. Cases with means within these ranges are considered adequate.

16. INTERVENTIONS

This is a breakdown of cases where one or more advanced interventions were performed. There are two groupings - BLS interventions (IV and advanced airway, including supraglottic airway), and ALS interventions (epinephrine and amiodarone). Please note that this table does not apply to fire services. BLS interventions can be performed in all EMS services and regions except Toronto, where ALS only can perform these interventions. ALS interventions apply to all EMS services and regions except Muskoka. A breakdown of time intervals, in minutes, is provided.

Trauma - Utstein Report

Service: [REDACTED]
 From 2015/01/01 To 2015/12/31

Generated: Thursday, 21 January 2016 2:23 P

All Traumas Attended by Service

N	226
Resuscitation attempted by EMS	214 (94.7%)
Obviously dead (legal legislation)	10 (4.4%)
DNR	2 (0.9%)
Unknown	0

Resuscitation Attempted, breakdown by Age

N	214
Pediatric trauma (age <= 11)	42 (19.6%)
Adult trauma	172 (80.4%)
Unknown	0

Call response intervals in minutes (Call received at dispatch to 1st service apparatus arrival), breakdown by outcome

	N	0-2	>2-4	>4-6	>6-8	>8-10	>10	Unknown
N	214	3	12	47	57	38	50	7
Pronounced at scene	4 (1.9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (5.3%)	2 (4.0%)	0
Alive and Not Transported	13 (6.1%)	1 (33.3%)	0 (0%)	4 (8.5%)	4 (7.0%)	1 (2.6%)	3 (6.0%)	0
Died in hospital	13 (6.1%)	0 (0%)	2 (16.7%)	4 (8.5%)	2 (3.5%)	4 (10.5%)	1 (2.0%)	0
Survived to discharge	181 (84.6%)	2 (66.7%)	9 (75.0%)	39 (83.0%)	50 (87.7%)	31 (81.6%)	43 (86.0%)	7
Unknown Vital Status	3	0	1	0	1	0	1	0

Call response intervals in minutes (Call received at dispatch to 1st service apparatus arrival)

Response intervals

N	0-2	>2-4	>4-6	>6-8	>8-10	>10	Unknown
214	3 (1.4%)	12 (5.6%)	47 (22.0%)	57 (26.6%)	38 (17.8%)	50 (23.4%)	7
Mean	Median	Std Dev	90th %tile				
8.09	7.60	3.64	12.67				

Service Response Interval in minutes (1st service crew notified to 1st service apparatus arrival)

Mean	Median	Std Dev	90th %tile
6.83	6.47	3.03	11.12

Service First on Scene (%) 95.79

Type of Injury, breakdown by Outcome - Treated

	N	33. Burn	34. Blunt	37. Penetrating / Perforation
N	214	4	209	1
Pronounced at Scene	4 (1.9%)	0 (0%)	4 (1.9%)	0 (0%)
Alive and Not Transported	13 (6.1%)	0 (0%)	13 (6.2%)	0 (0%)
Died in hospital	13 (6.1%)	0 (0%)	13 (6.2%)	0 (0%)
Survived to discharge	181 (84.6%)	4 (100%)	176 (84.2%)	1 (100%)
Unknown Vital Status	3	0	3	0

Mechanism of Injury, breakdown by Outcome - Treated (table continues on next page)

	N	15. not noted	50. assault	51. drowning	52. electrocution	53. fall (same level)	54. fall from Height	55. gunshot	56. hanging
N	214	3	4	0	0	103	35	0	1
Pronounced at Scene	4 (1.9%)	0 (0%)	0 (0%)	0	0	0 (0%)	0 (0%)	0	0 (0%)
Alive and Not Transported	13 (6.1%)	0 (0%)	1 (25.0%)	0	0	6 (5.8%)	2 (5.7%)	0	0 (0%)
Died in hospital	13 (6.1%)	0 (0%)	0 (0%)	0	0	8 (7.8%)	2 (5.7%)	0	0 (0%)
Survived to discharge	181 (84.6%)	3 (100%)	3 (75.0%)	0	0	89 (86.4%)	31 (88.6%)	0	1 (100%)
Unknown Vital Status	3	0	0	0	0	0	0	0	0

	N	57. machinery	58. mvc (motor vehicle crash)	59. motorcycle / recreational vehicle	60. pedal bicycle struck	61. pedestrian struck	62. sports	63. stabbing	64. fire / explosion / thermal	65. other
N	0	17	2	7	5	10	1	3	23	
Pronounced at Scene	0	1 (5.9%)	1 (50.0%)	0 (0%)	1 (20.0%)	0 (0%)	0 (0%)	0 (0%)	1 (4.3%)	
Alive and Not Transported	0	1 (5.9%)	0 (0%)	0 (0%)	0 (0%)	1 (10.0%)	0 (0%)	0 (0%)	2 (8.7%)	
Died in hospital	0	3 (17.6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Survived to discharge	0	9 (52.9%)	1 (50.0%)	7 (100%)	4 (80.0%)	9 (90.0%)	1 (100%)	3 (100%)	20 (87.0%)	
Unknown Vital Status	0	3	0	0	0	0	0	0	0	

	66. atv (air code only)	67. snowmobile (air code only)	68. watercraft (air code only)	69. fall from diving (air code only)	Unknown
N	0	0	0	0	0
Pronounced at Scene	0	0	0	0	0
Alive and Not Transported	0	0	0	0	0
Died in hospital	0	0	0	0	0
Survived to discharge	0	0	0	0	0
Unknown Vital Status	0	0	0	0	0

Location of Injury, breakdown by Outcome

	N	Street / Highway	Public Building	Place of Recreation	Industrial	Other Public	Home Residence	Farm / Ranch
N	214	33	24	11	2	1	103	1
Pronounced at Scene	4 (1.9%)	2 (6.1%)	0 (0%)	0 (0%)	1 (50.0%)	0 (0%)	1 (1.0%)	0 (0%)
Alive and Not Transported	13 (6.1%)	1 (3.0%)	1 (4.2%)	2 (18.2%)	0 (0%)	0 (0%)	7 (6.8%)	0 (0%)
Died in hospital	13 (6.1%)	3 (9.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (8.7%)	0 (0%)
Survived to discharge	181 (84.6%)	24 (72.7%)	23 (95.8%)	9 (81.8%)	1 (50.0%)	1 (100%)	86 (83.5%)	1 (100%)
Unknown Vital Status	3	3	0	0	0	0	0	0

		Healthcare Facility	Residential Institution	Other	Unknown
N	0	26	13	0	0
Pronounced at Scene	0	0 (0%)	0 (0%)	0	0
Alive and Not Transported	0	1 (3.8%)	1 (7.7%)	0	0
Died in hospital	0	1 (3.8%)	0 (0%)	0	0
Survived to discharge	0	24 (92.3%)	12 (92.3%)	0	0
Unknown Vital Status	0	0	0	0	0

Receiving Hospital Type, breakdown by Outcome

	N	Trauma Centre	Transfer from Community to Trauma Centre	Community Hospital	Unknown / Not applicable
N	214	24	5	168	17
Pronounced at Scene	4 (1.9%)	0 (0%)	0 (0%)	0 (0%)	4
Alive and Not Transported	13 (6.1%)	0 (0%)	0 (0%)	0 (0%)	13
Died in hospital	13 (6.1%)	3 (12.5%)	0 (0%)	10 (6.0%)	0
Survived to discharge	181 (84.6%)	20 (83.3%)	5 (100%)	156 (92.9%)	0
Unknown Vital Status	3	1	0	2	0

Type of Injury, breakdown by Outcome - Obviously dead or DNR

	N	30. Abrasion	31. Amputation	32. Avulsion	33. Burn	34. Blunt	35. Crush	36. Contusion	37. Penetrating / Perforation
N	12	0	0	0	1	8	0	0	3
	N	38. Possible Fracture / Dislocation	39. Laceration	40. Sprain / Strain	41. Other	99. Not Noted	Unknown		
N	0	0	0	0	0	0	0		

Mechanism of Injury, breakdown by Outcome - Obviously dead or DNR

	N	15. not noted	50. assault	51. drowning	52. electrocution	53. fall (same level)	54. fall from Height	55. gunshot	56. hanging	
N	12	0	0	0	0	0	1	2	0	
	N	57. machinery	58. mvc (motor vehicle crash)	59. motorcycle / recreational vehicle	60. pedal bicycle	61. pedestrian struck	62. sports	63. stabbing	64. fire / explosion / thermal	65. other
N	0	3	2	0	0	0	0	0	4	
	N	66. atv (air code only)	67. snowmobile (air code only)	68. watercraft (air code only)	69. fall from diving (air code only)	Unknown				
N	0	0	0	0	0	0				

ABBREVIATIONS/DEFINITIONS

Trauma - for the purposes of the Rescu Epistry data set, a trauma is defined by the following points, without exception:

1. An acute injury cause by an external force (blunt, burn, or penetrating)
2. One or more of the following vitals signs:
 - Systolic BP less than or equal to 90 mmhg
 - Respiratory rate less than or equal to 10, or greater than or equal to 30
 - GCS less than or equal to 12
 - VSA

1. ALL TRAUMAS ATTENDED BY SERVICE

Breakdown of trauma calls by treatment rendered. Resuscitation attempted by EMS refers to treated and/or transported patients, both with and without vital signs. Obviously dead and DNR refers to untreated patients without vital signs.

2. RESUCITATION ATTEMPTED, BREAKDOWN BY AGE

Breakdown by pediatric and adult age group for all treated and/or transported traumas. Please note that the pediatric cohort may seem over-represented. This is because the vital signs that make up the inclusion criteria are not adjusted for children (for example, a systolic blood pressure of 90 mmhg or a respiratory rate of 30 warrants inclusion in the study, even though this may be perfectly acceptable for a pediatric patient).

3. CALL RESPONSE INTERVALS IN MINUTES (CALL RECEIVED AT DISPATCH TO 1ST SERVICE APPARATUS ARRIVAL), BREAKDOWN BY OUTCOME

Breakdown of patient outcome as measured by interval from 911 call received at dispatch to first vehicle arrival at scene.

4. CALL RESPONSE INTERVALS IN MINUTES (CALL RECEIVED AT DISPATCH TO 1ST SERVICE APPARATUS ARRIVAL)

Breakdown of response times in 2-minute intervals. Measure is from call received at dispatch to wheels stopped of the first arriving vehicle of the service.

5. SERVICE RESPONSE INTERVAL IN MINUTES (1ST SERVICE CREW NOTIFIED TO 1ST SERVICE APPARATUS ARRIVAL)

Breakdown of average times from first vehicle dispatched to first vehicle arrival at scene.

6. SERVICE FIRST ON SCENE

Percentage of cases for which the service was first on scene. Please note that fire services are greatly under-represented by this number because fire dispatch information is not received for the majority of Rescu Epistry trauma cases.

7. TYPE OF INJURY, BREAKDOWN BY OUTCOME

Breakdown of patient outcome by injury type. Please note that as of February 18th 2010, injury type has been limited to blunt, burn, or penetrating.

8. MECHANISM OF INJURY, BREAKDOWN BY OUTCOME

Breakdown of patient outcome by injury type.