

***OPALS Cardiac Arrest Database
(OCAD) Summary
December 04 – November 05***



Ottawa

November 2006

OPALS Cardiac Arrest Database (OCAD) Overview

- **The world's largest multicenter prehospital cardiac arrest database**
- **More than 20,000 cases entered since 1991**
- **20 cities and 11 Base Hospital Regions**

Who Are the Patients Enrolled in OCAD?



**Witnessed & Un-witnessed
Arrests**

**All medical
cardiac arrests**

**Pts. > 16 years
of age**

Patient Characteristics ***(N=1,321)***

Age in years (mean)	68
Male	67%
Bystander Witnessed	41%
Initial Rhythm (%)*	
VF or VT	25%
PEA	23%
Asystole	41%

* 5% awaiting follow up, 6% rhythm not available

Cardiac Arrest Submission ***(N=1,321)***

Cambridge	162
Halton-Mississauga	118
Kingston	62
London	189
Niagara	199
Ottawa	255
Peterborough	80
Sarnia	66
Sudbury	39
Thunder Bay	72
Windsor	79

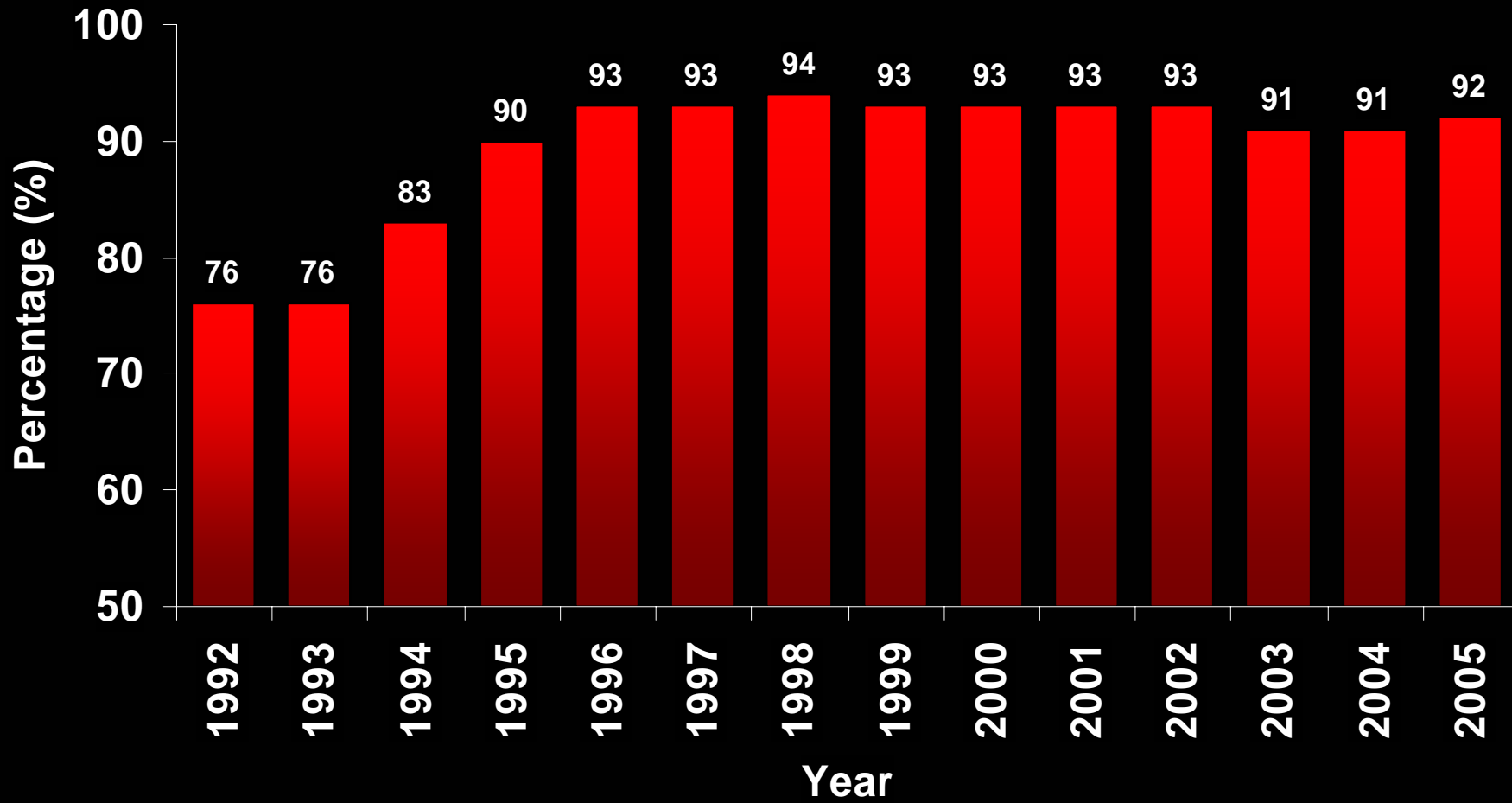
OACD EMS Response...



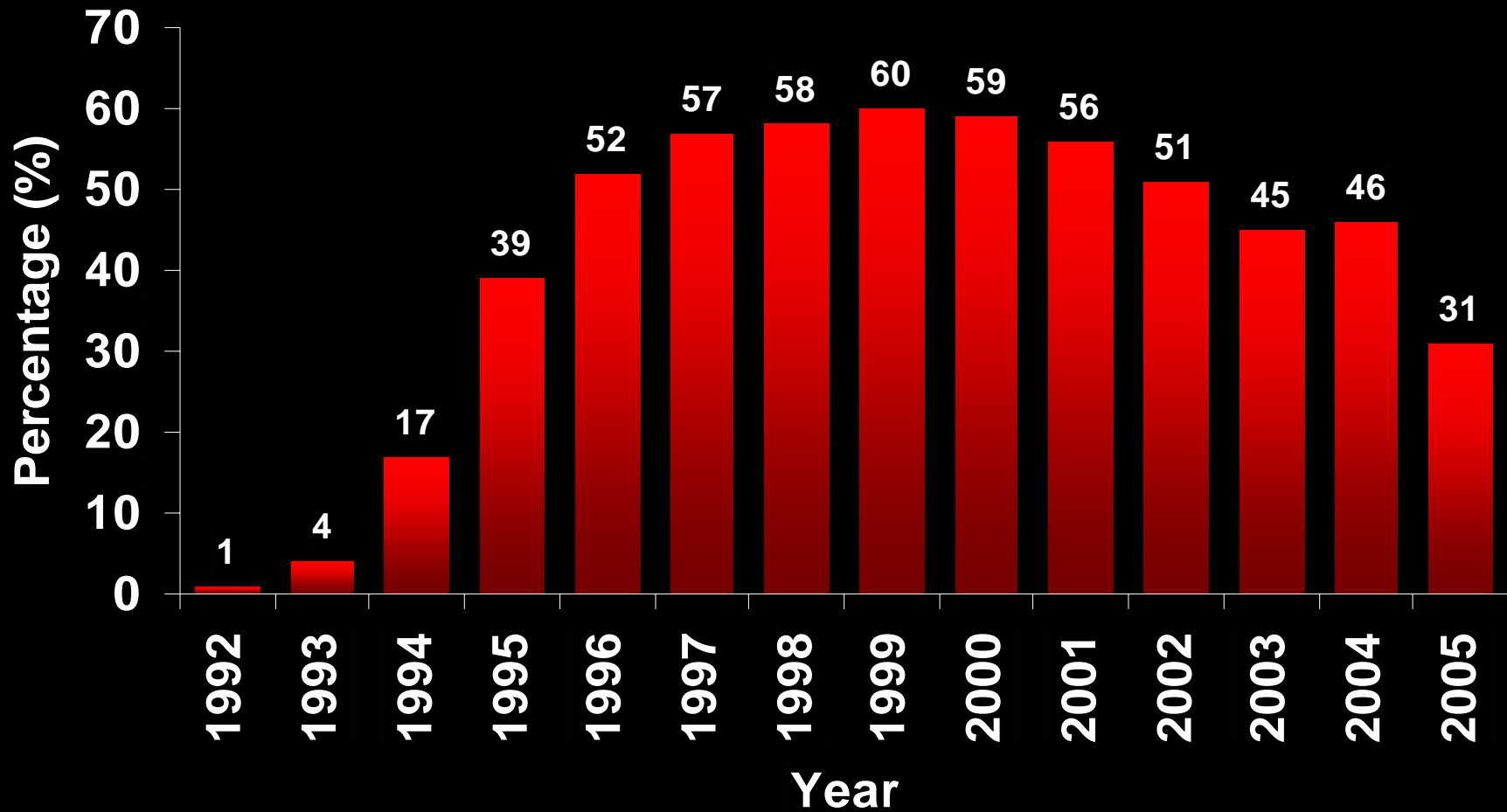
EMS Response Criteria

Defib at scene \leq 8 min	91.5%
ALS paramedic at scene	86.5%
ALS paramedic 11 min	86.1%
Successful intubation	72.1%
Successful IV insertion	75.1%
LMA insertion	3.2%
ACLS drug administration	79.7%

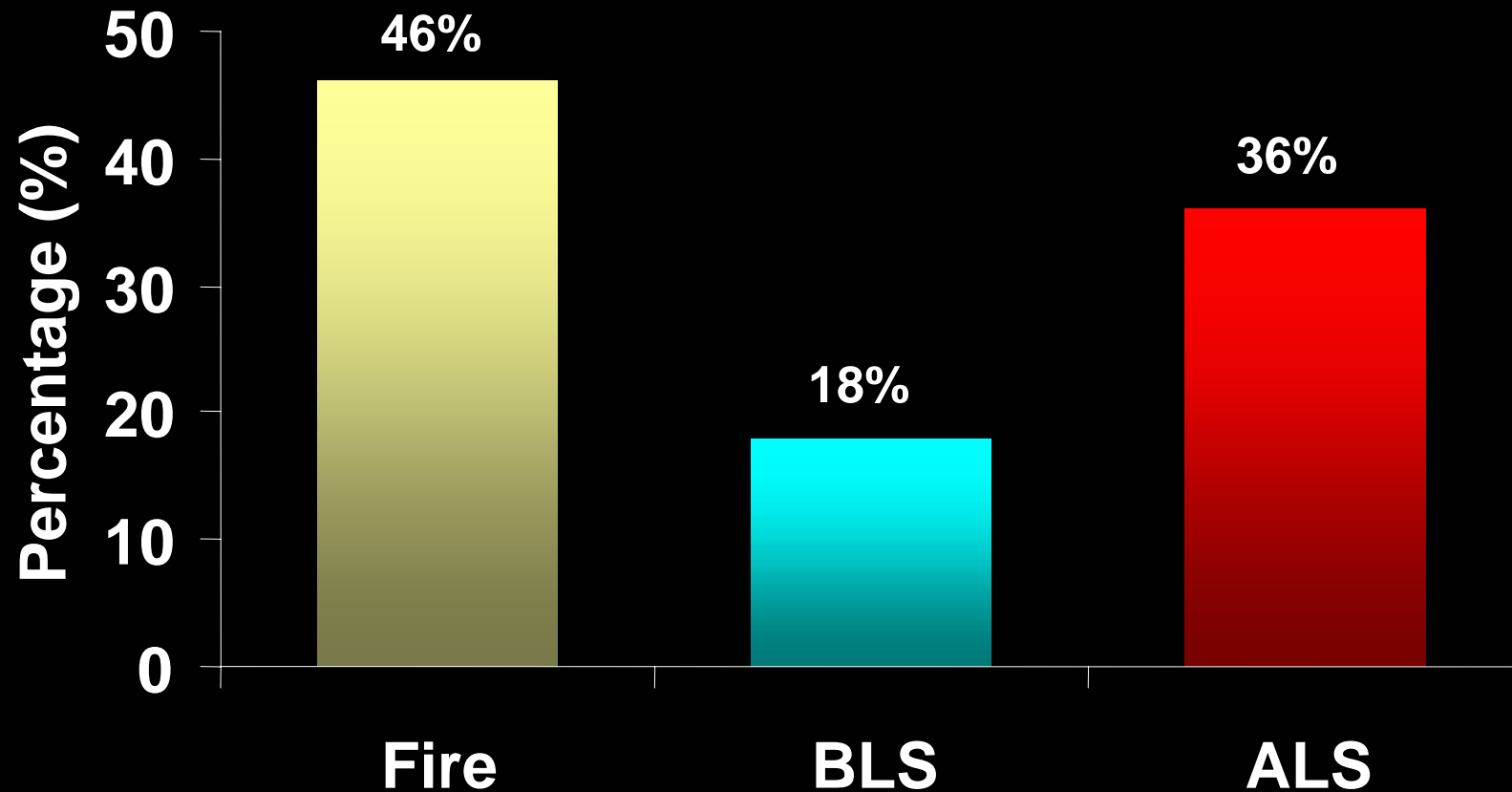
% of Cases with Defibrillator Arrival at Scene 8 Min or Less (by Year)



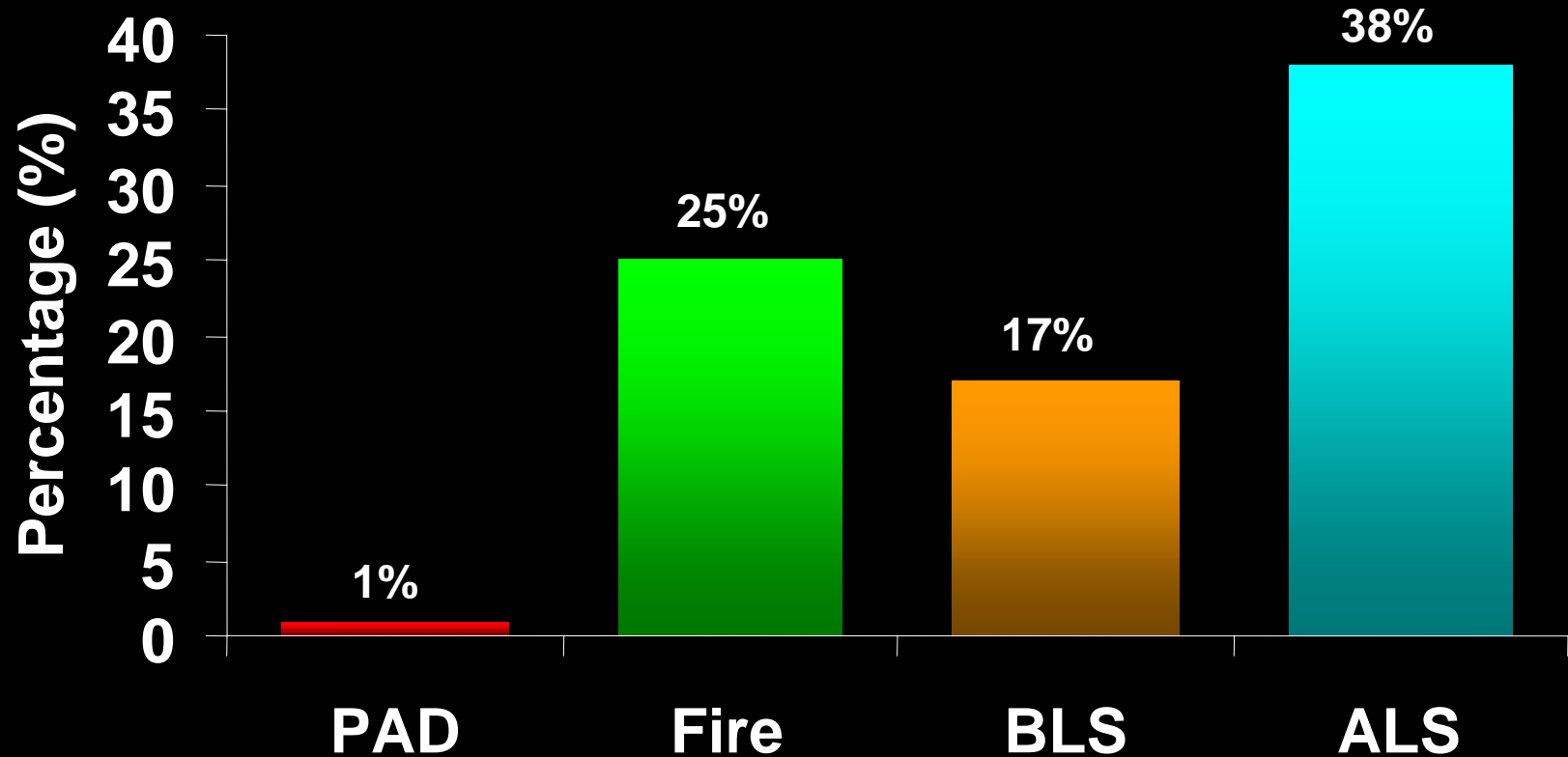
% Cases with Fire Arrival First at Scene (by Year)



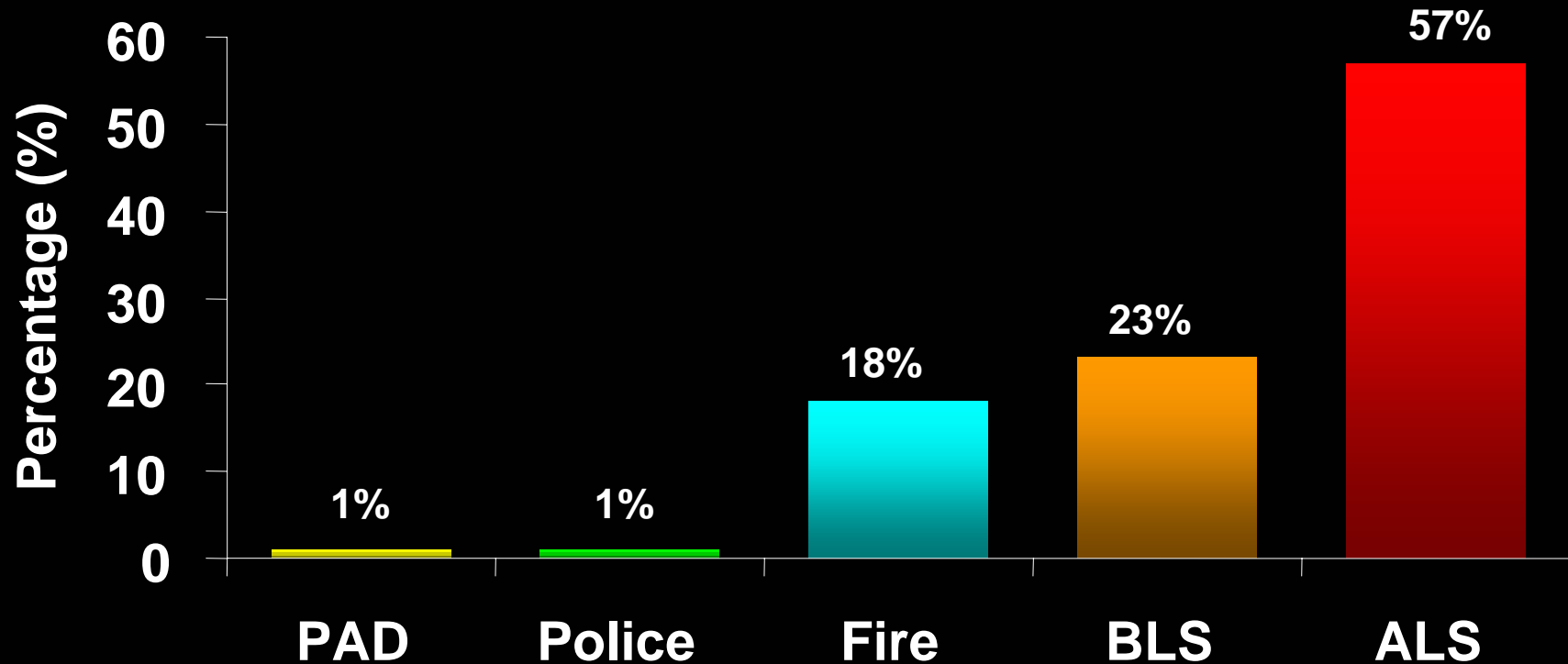
First to Scene (N=1,321)



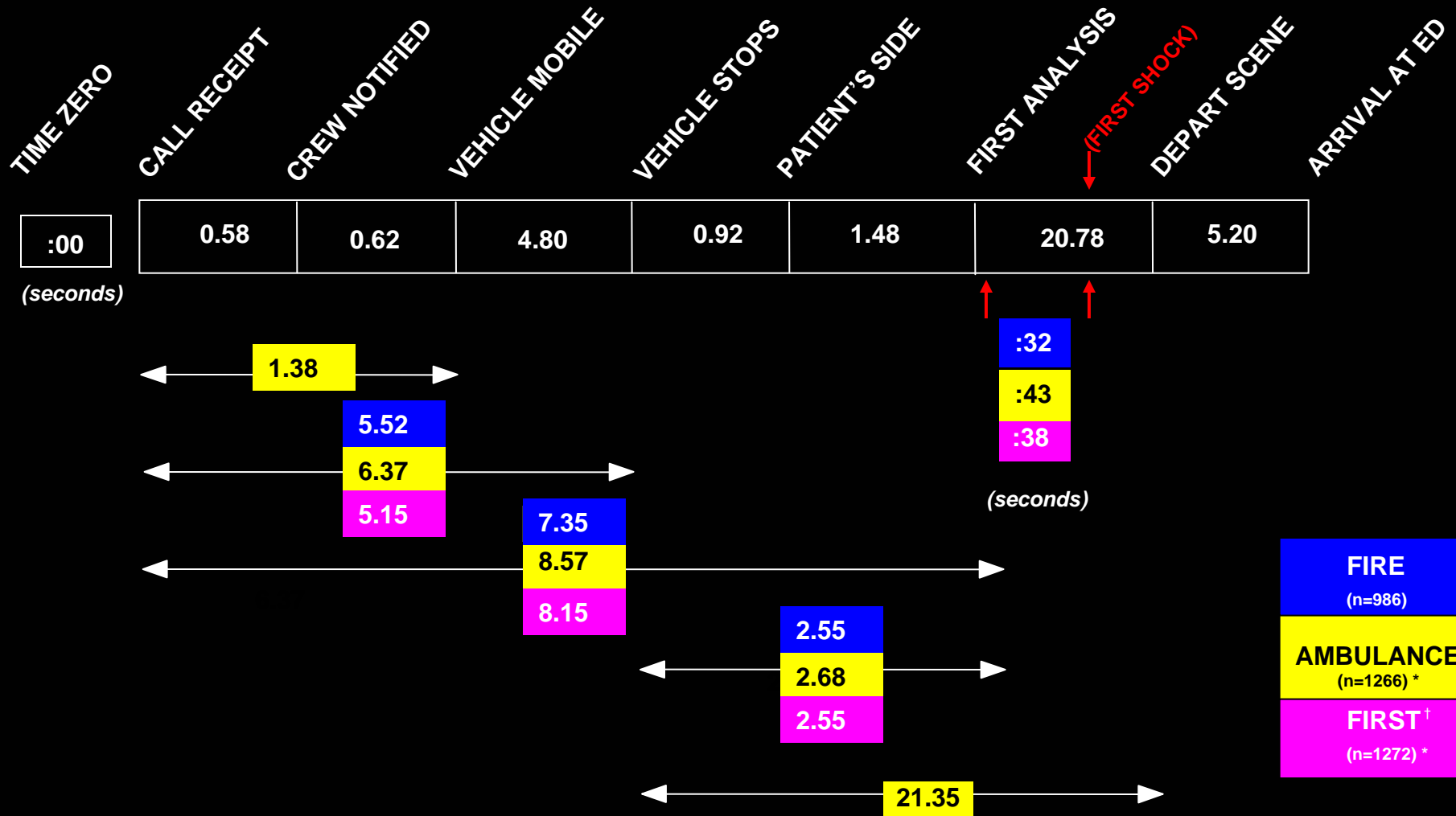
First Analysis (N=1,072)



First Shock Administered *(N=524)*



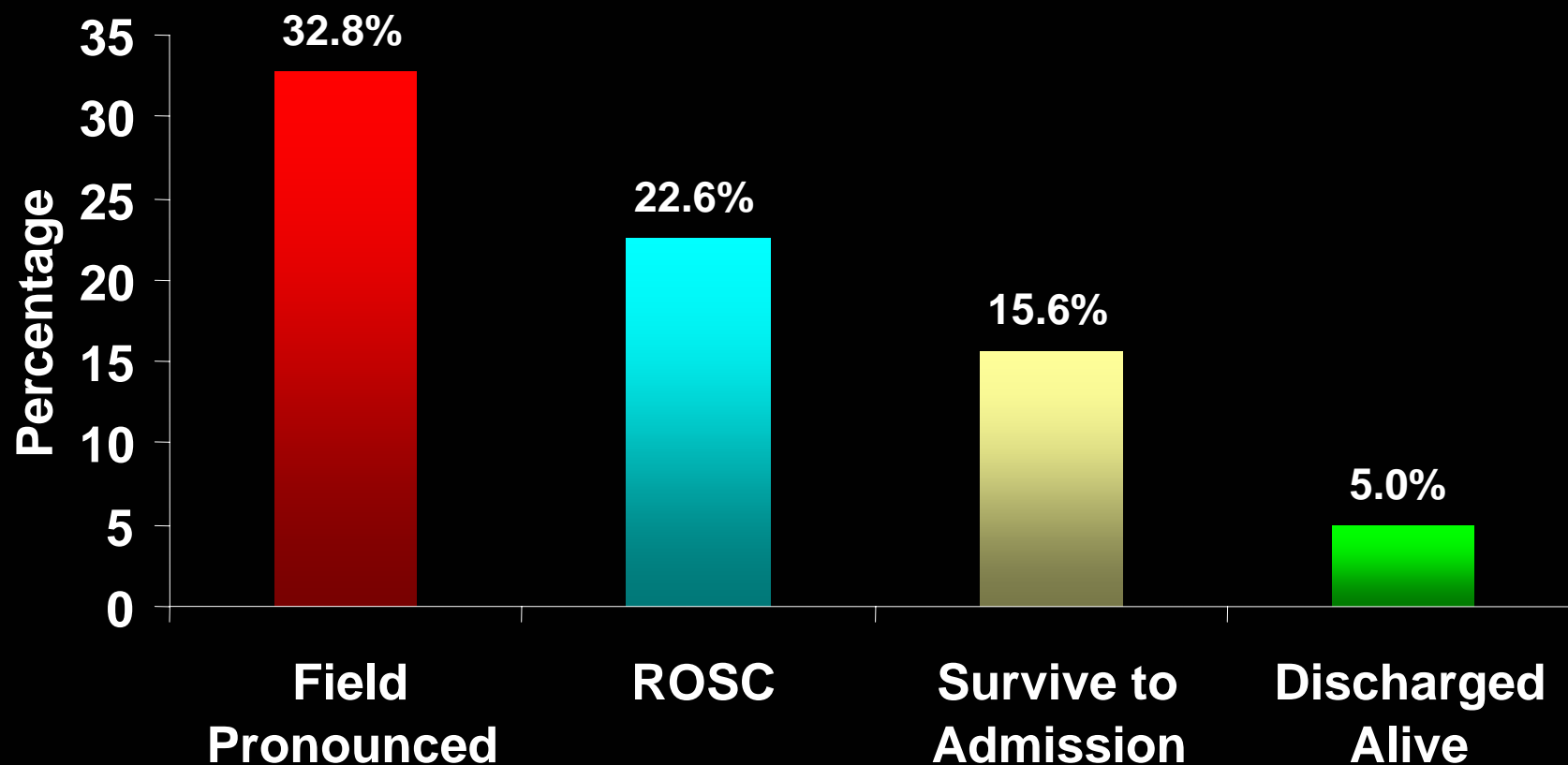
EMS Median Time Intervals (Minutes)



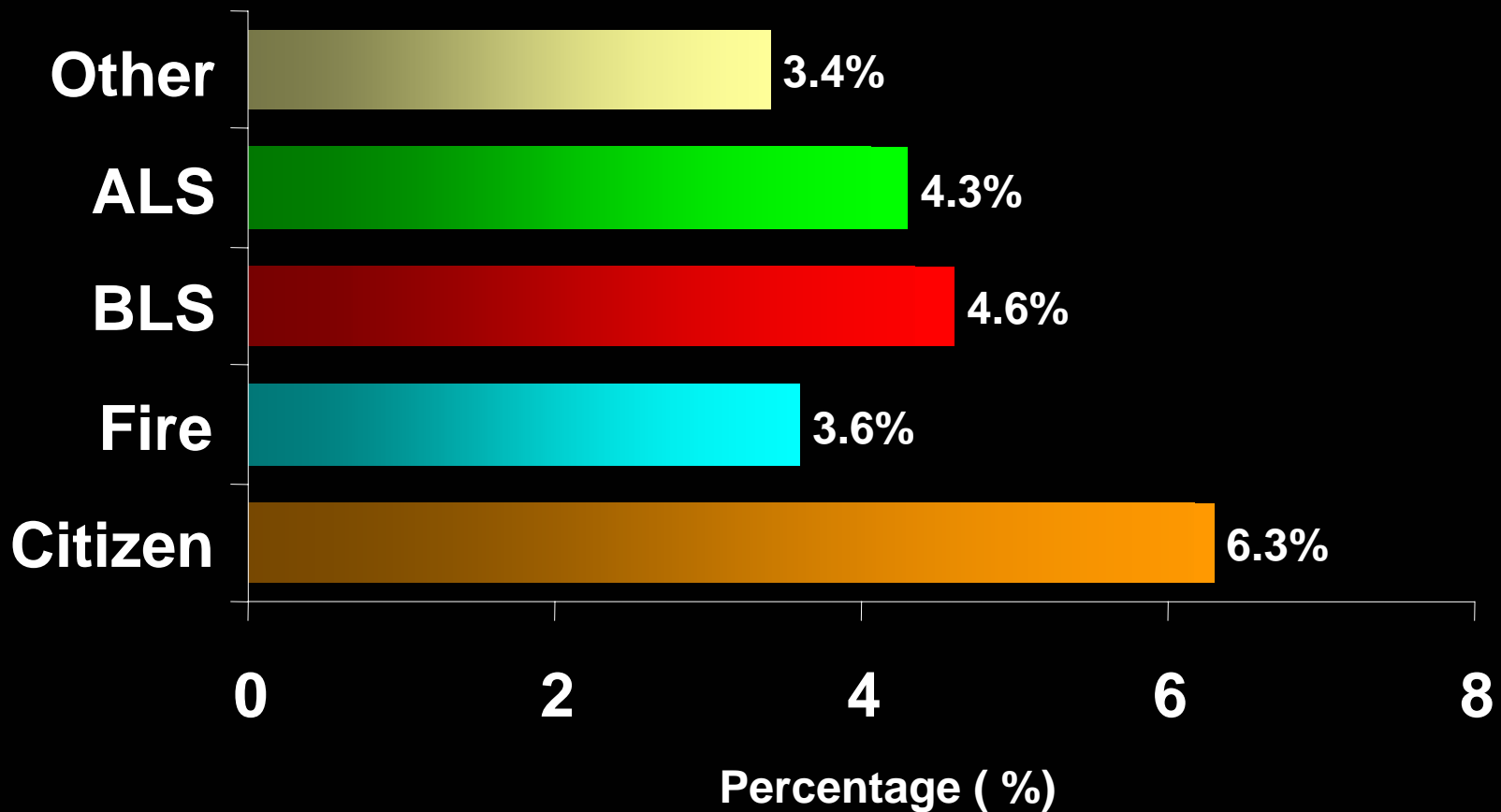
What Happens to these Patients?



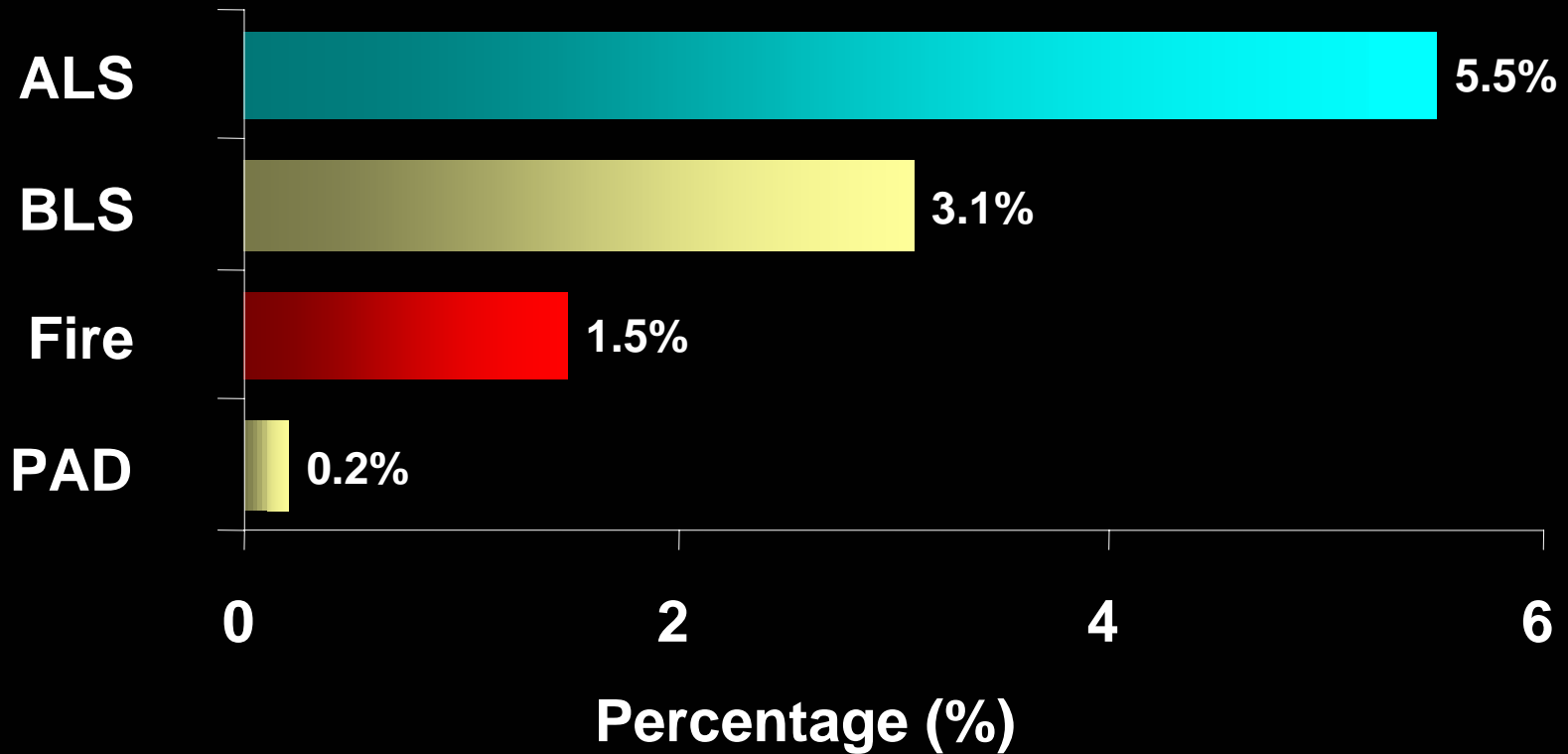
Patient Outcome



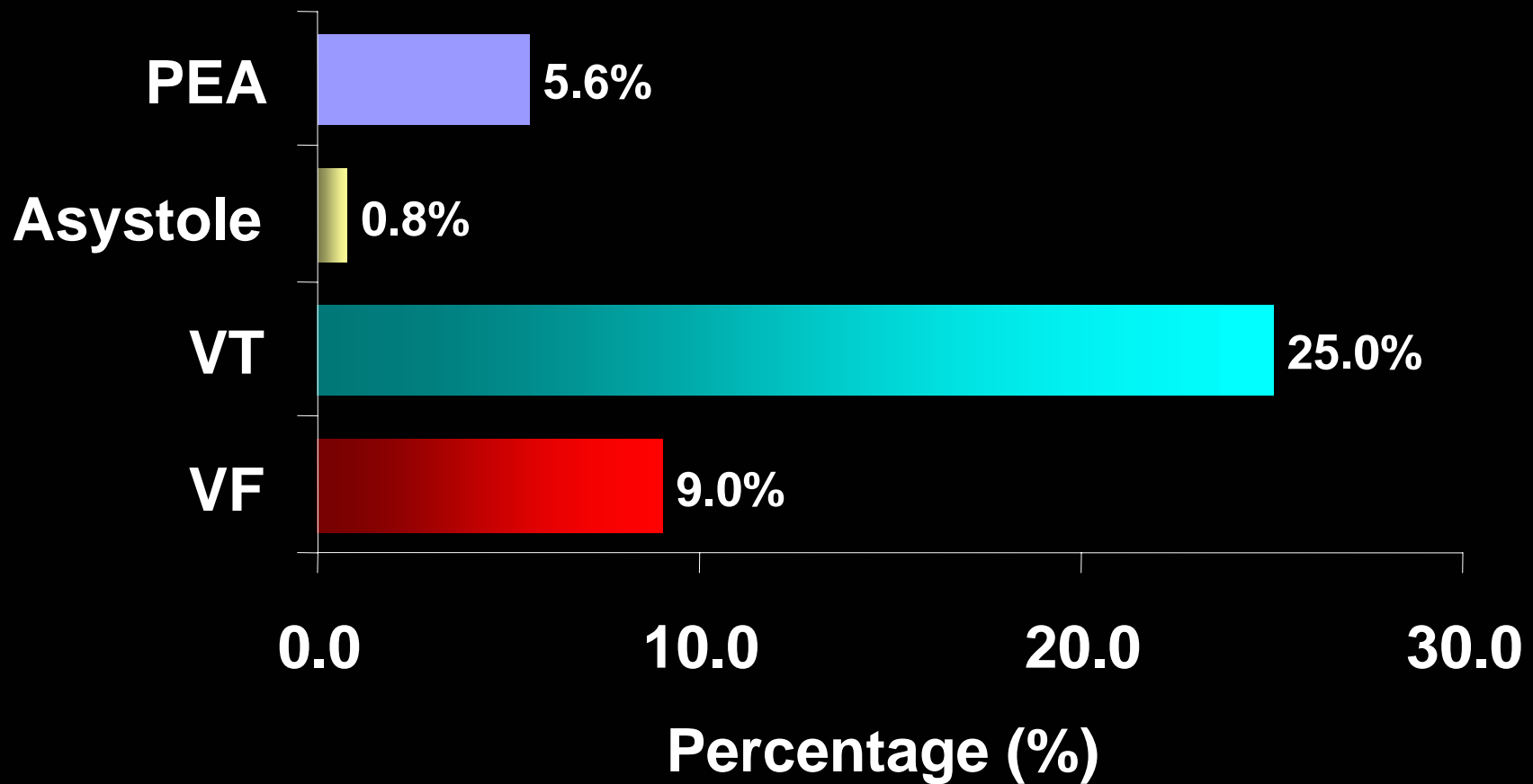
% Discharged Alive by Who Started CPR (N=1,259)



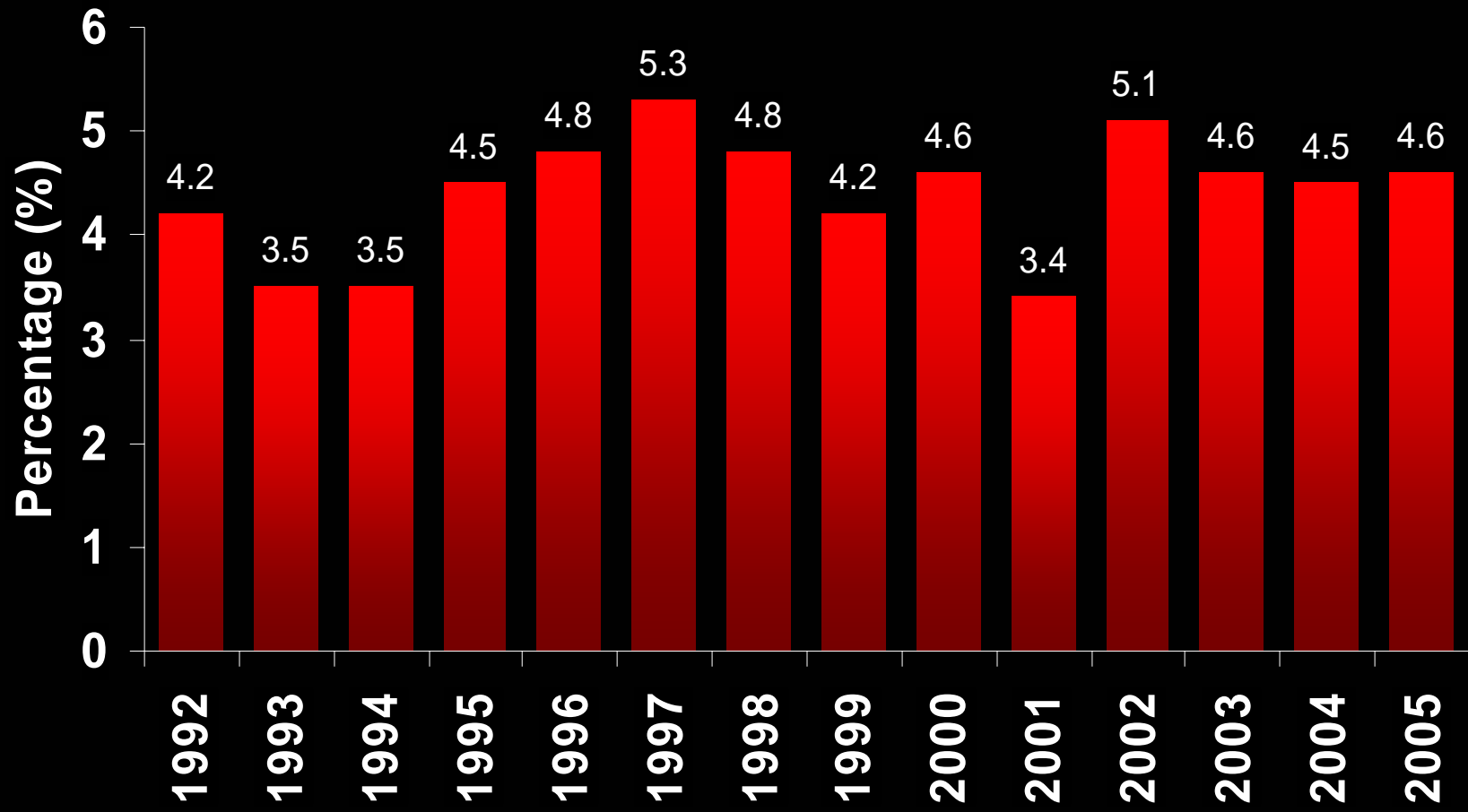
% Discharged Alive by Who Administered First Shock (N=524)



% Discharged Alive by Initial Rhythm (N=1,150)



% Discharged Alive by Year

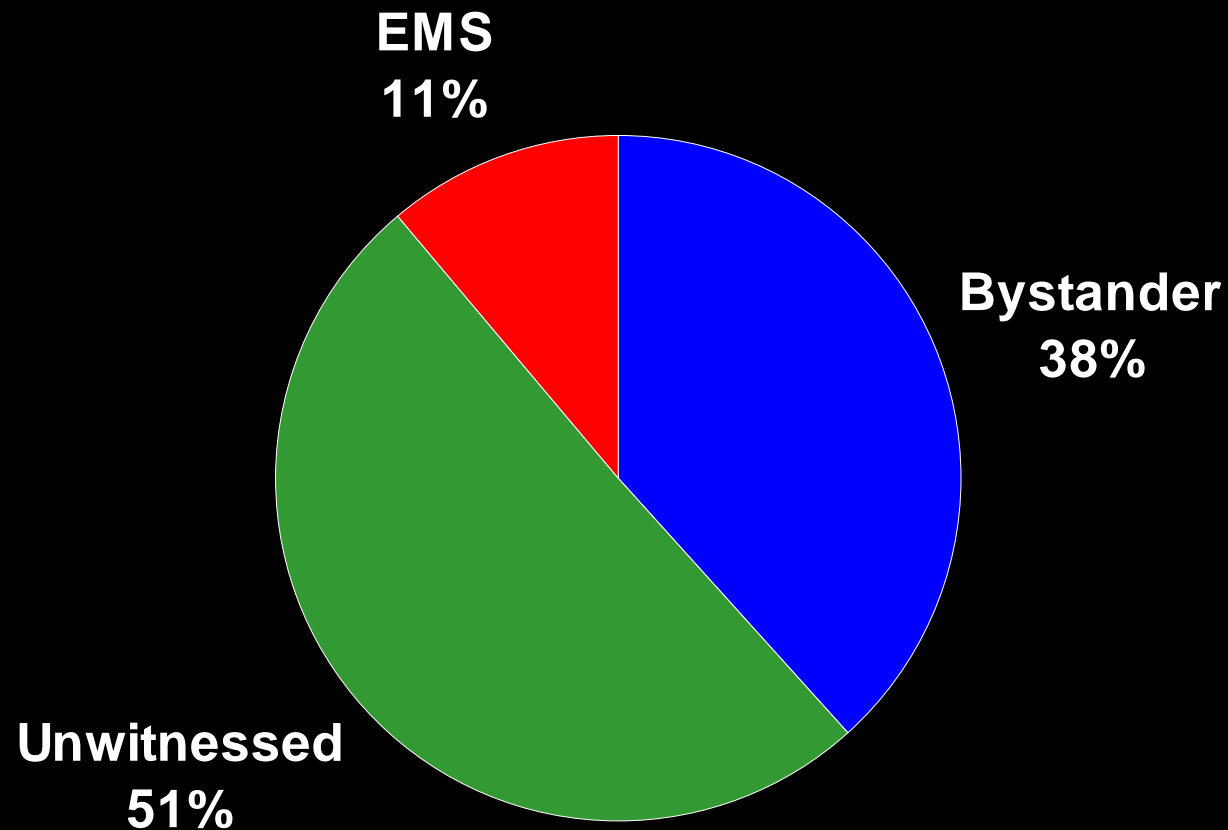


Summary

- **The world's largest cardiac arrest database**
- **Provides high quality, efficient data collection and reporting**
- **Will be used to generate data for the ROC registry**
- **A valuable resource for research papers**



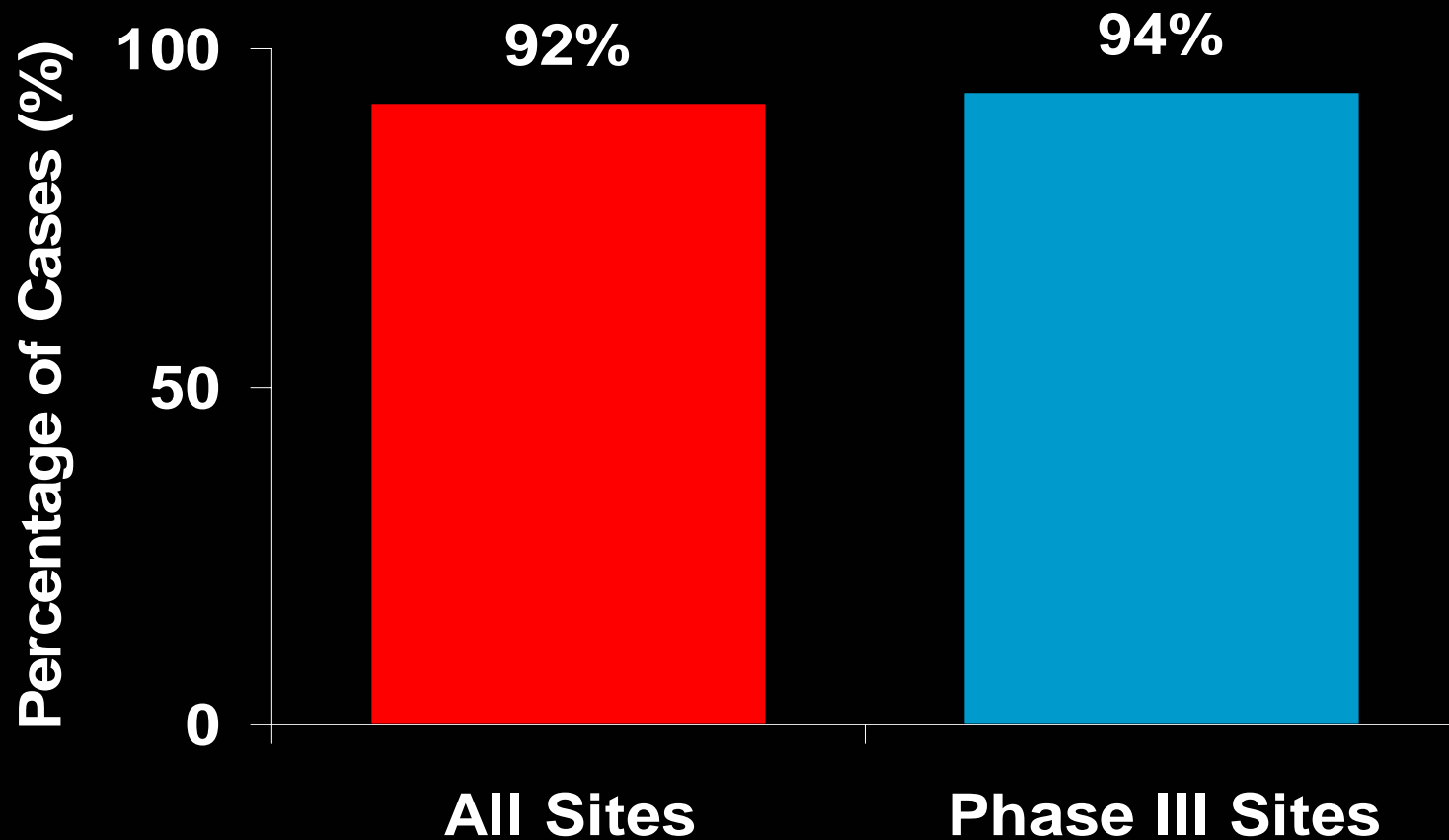
Arrest Witnessed (N=1376)



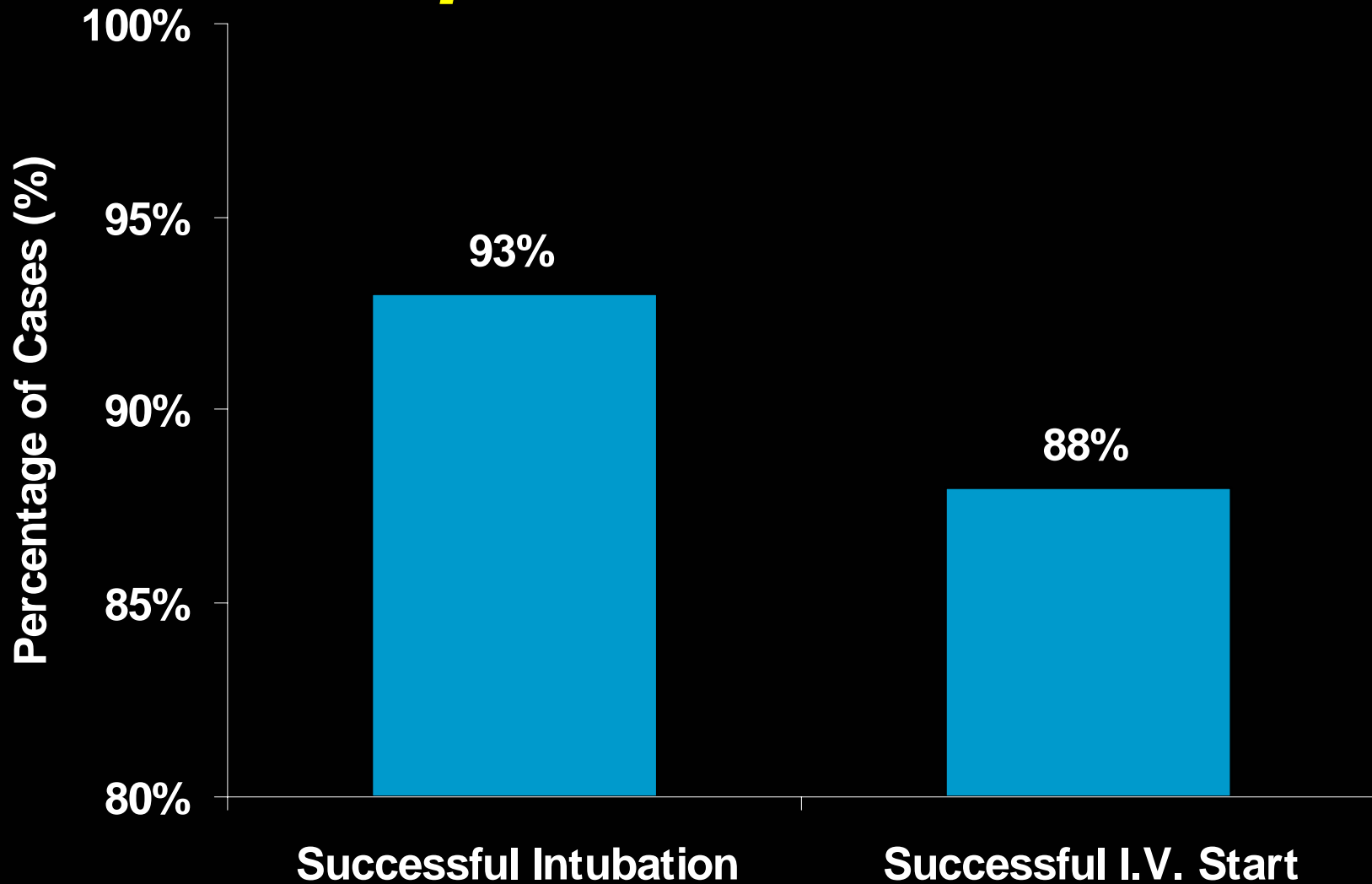
CPR Started by (N=1,376)



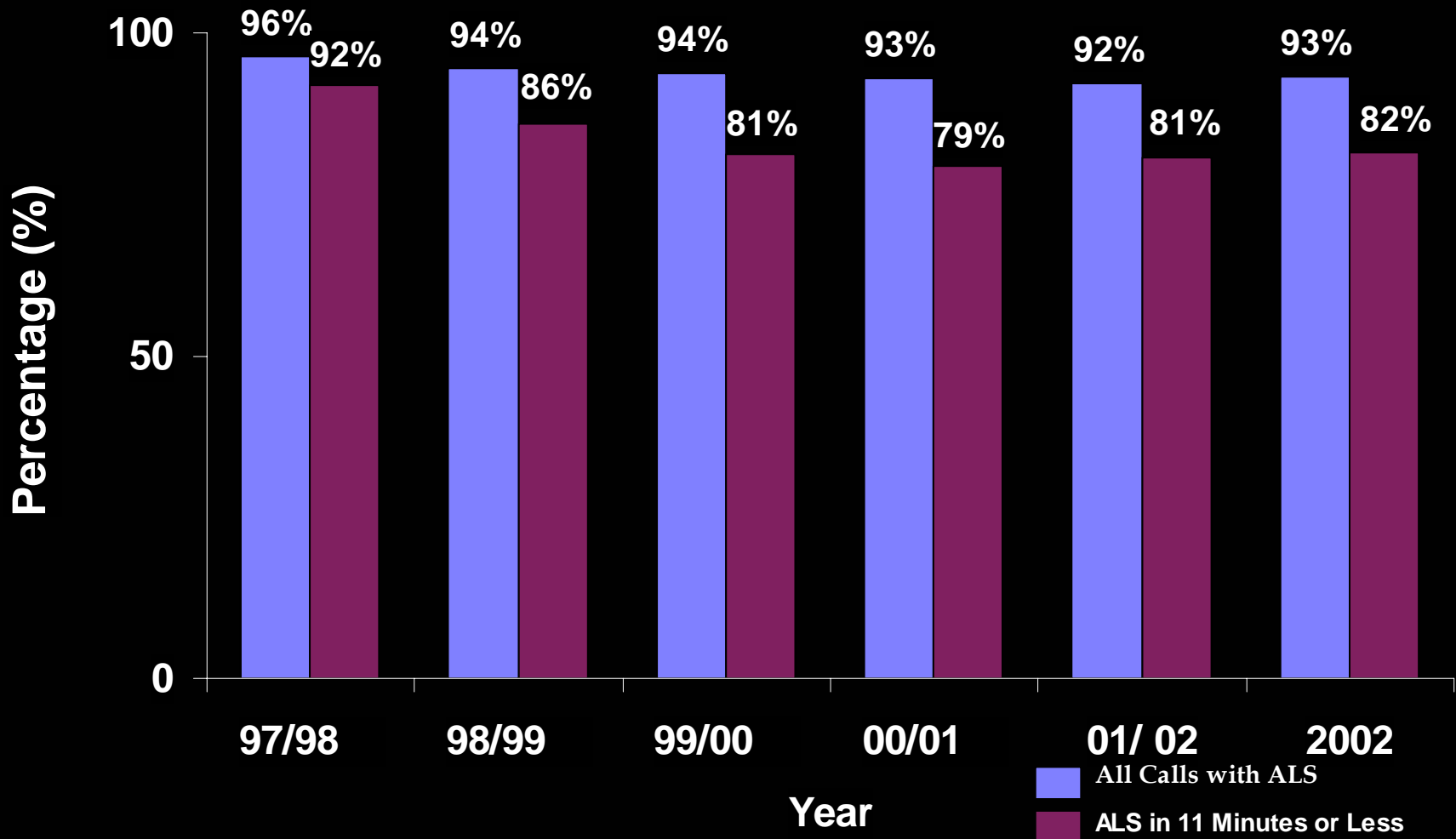
Overall Advanced Care Paramedic Response



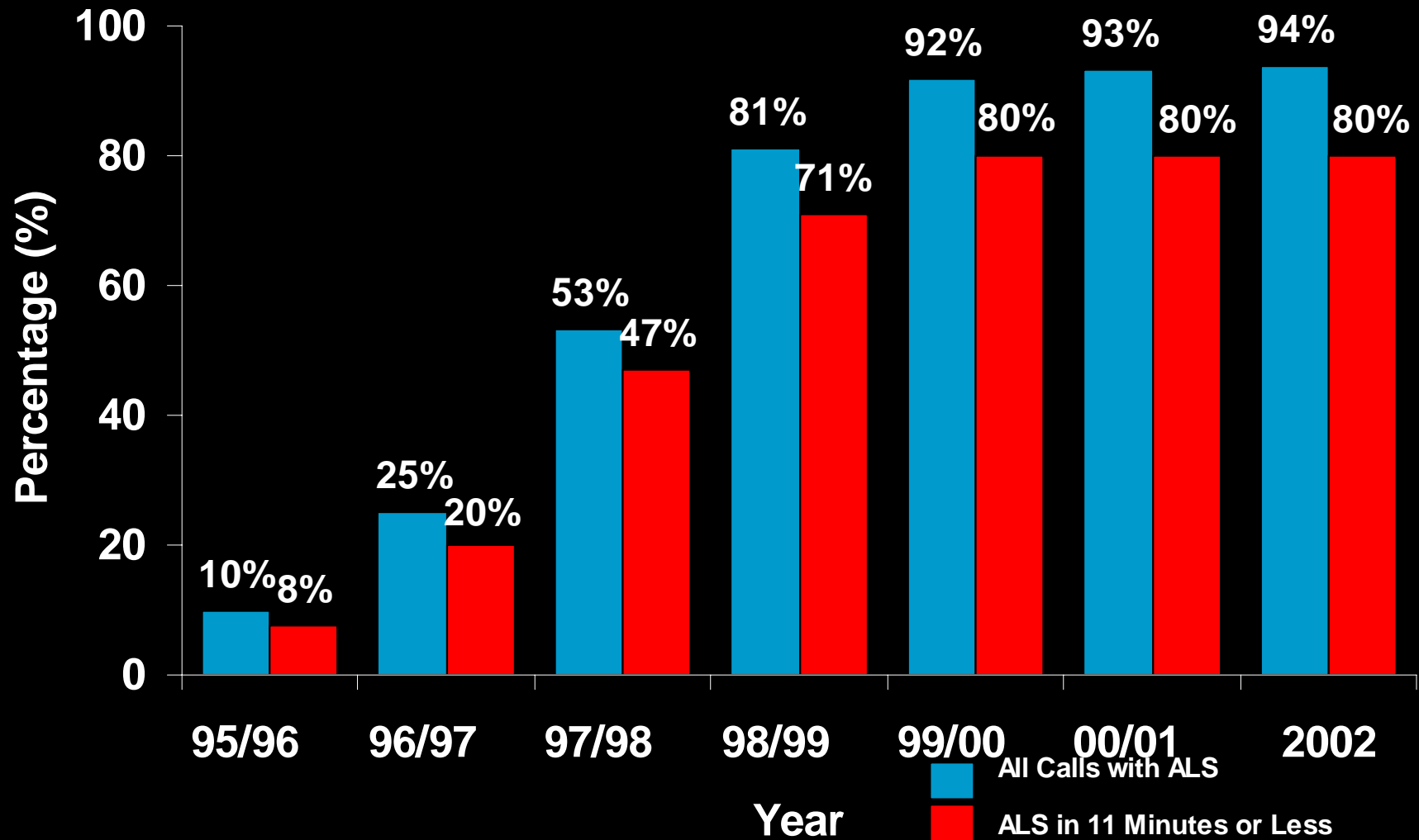
Advanced Care Paramedic Response Characteristics



% Cases with ACP Arrival at Scene (by Year) Phase III Communities



% Cases with ACP Arrival at Scene (by Year) All Communities



Base Hospital

Community

(N=1,538)

Halton Region

Burlington *

75

Oakville *

49

Cambridge

Cambridge *

60

Kitchener/Waterloo * 102

Kingston

Kingston *

67

London

London *

165

Niagara Region

Grimsby

11

Niagara *

52

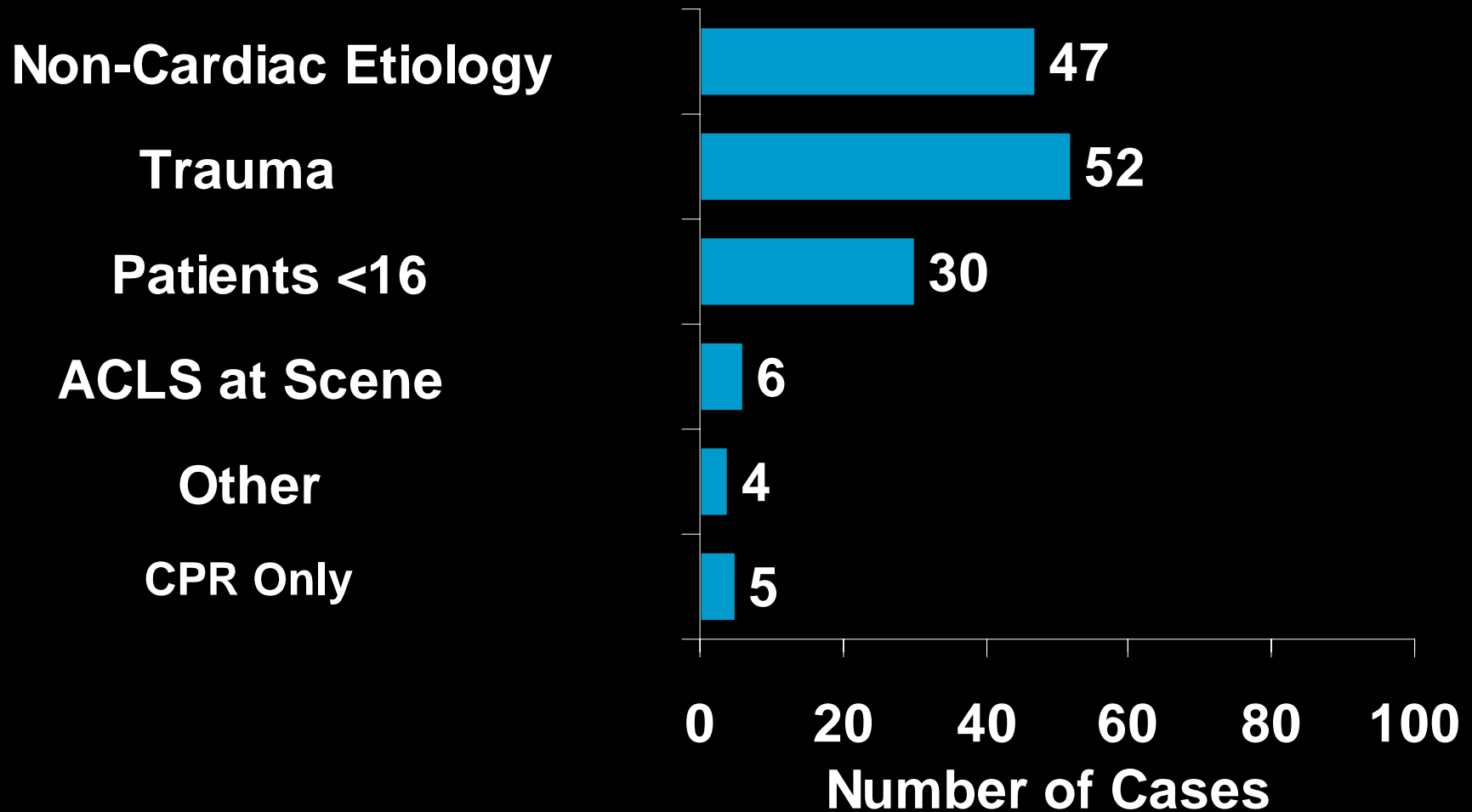
Port Colborne *

17

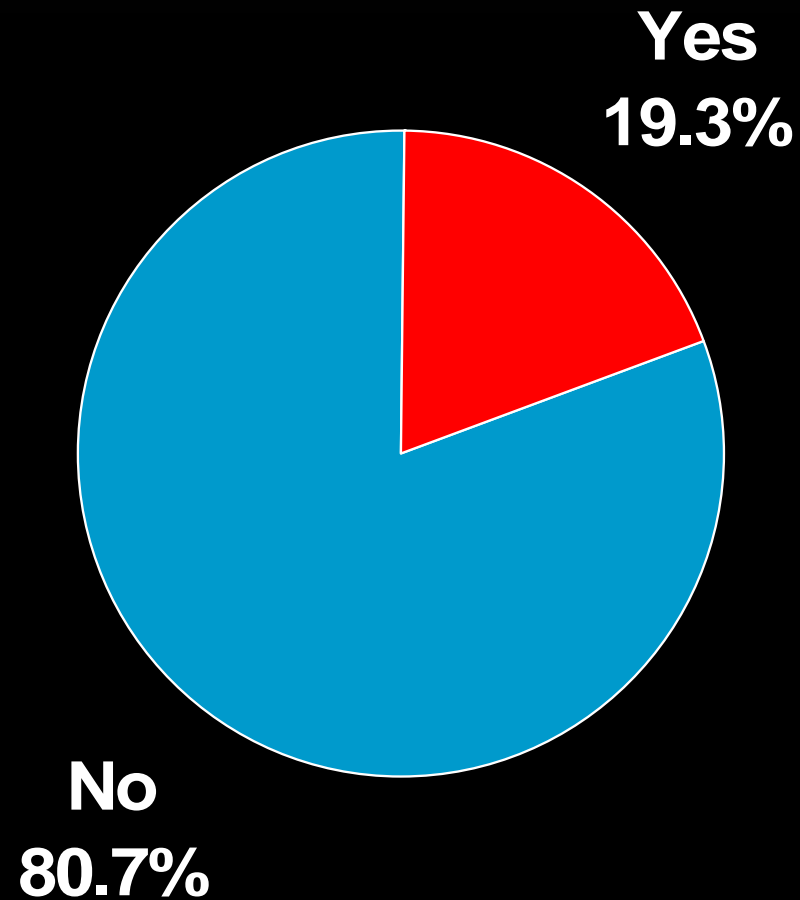
*** Sites in Phase III**

<i>Base Hospital</i>	<i>Community</i>	<i>(N=1,395)</i>
Niagara Region	St. Catharines *	80
	Welland *	32
Ottawa	Ottawa *	292
Peterborough	Lindsay	14
	Peterborough *	44
	Port Hope/Cobourg *	19
Sarnia	Sarnia*	55
Sudbury	Sudbury*	43
Thunder Bay	Thunder Bay *	69
Windsor	Windsor *	121

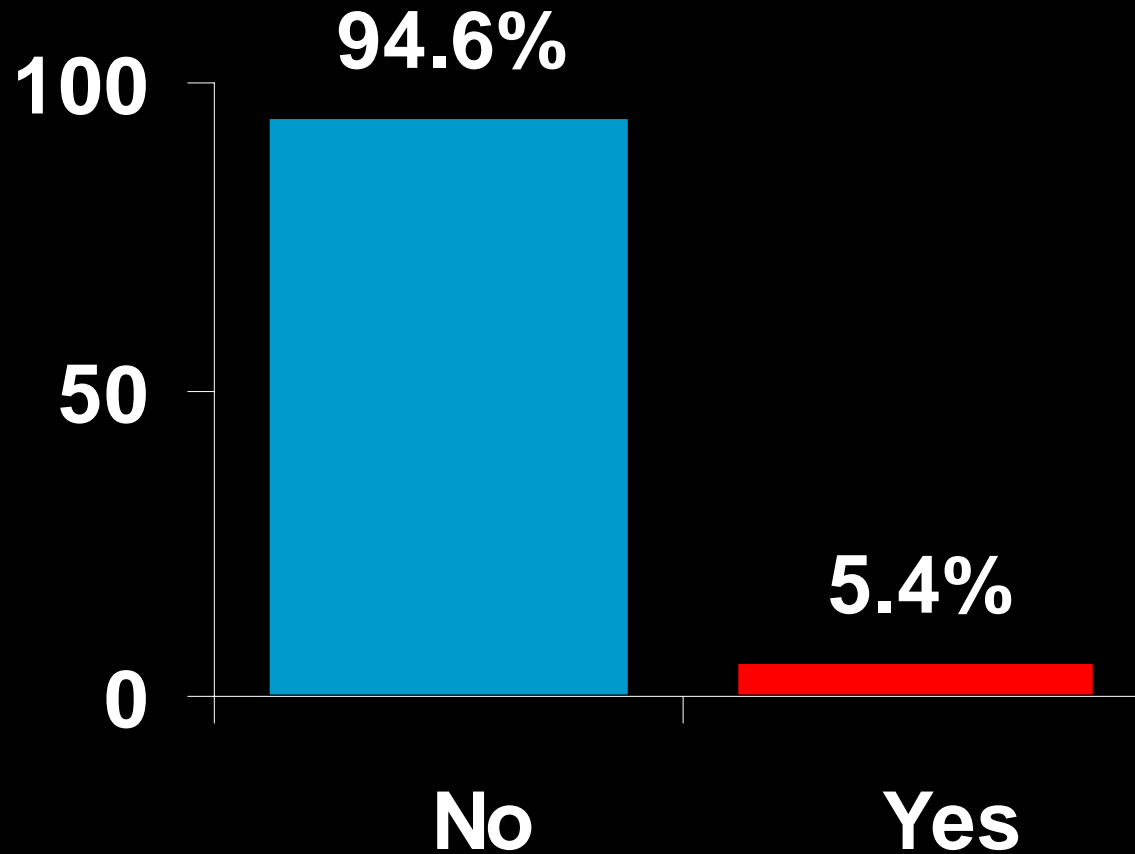
Reason for Ineligibility (N=162)



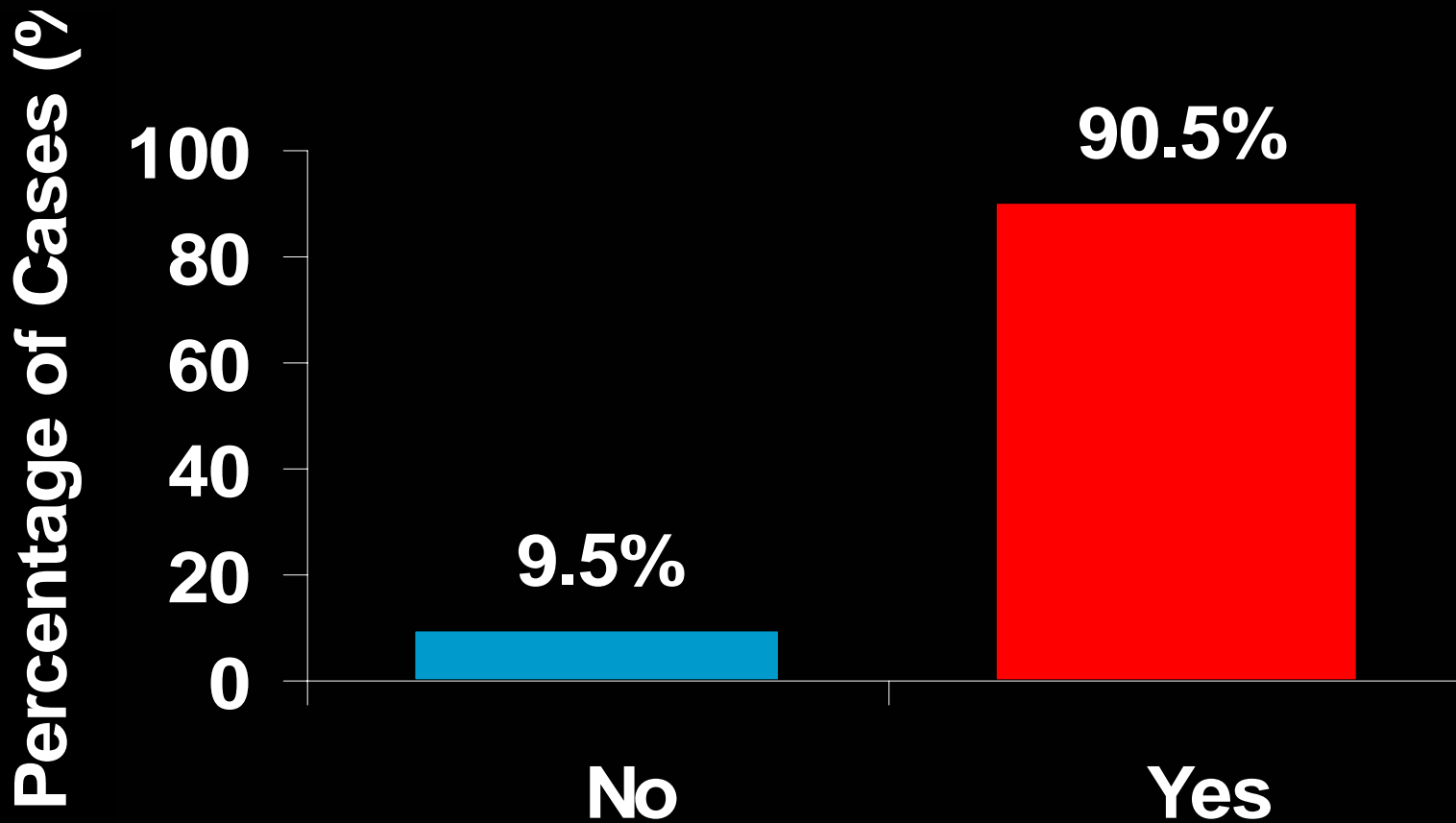
Return of Spontaneous Circulation (N=1,275)



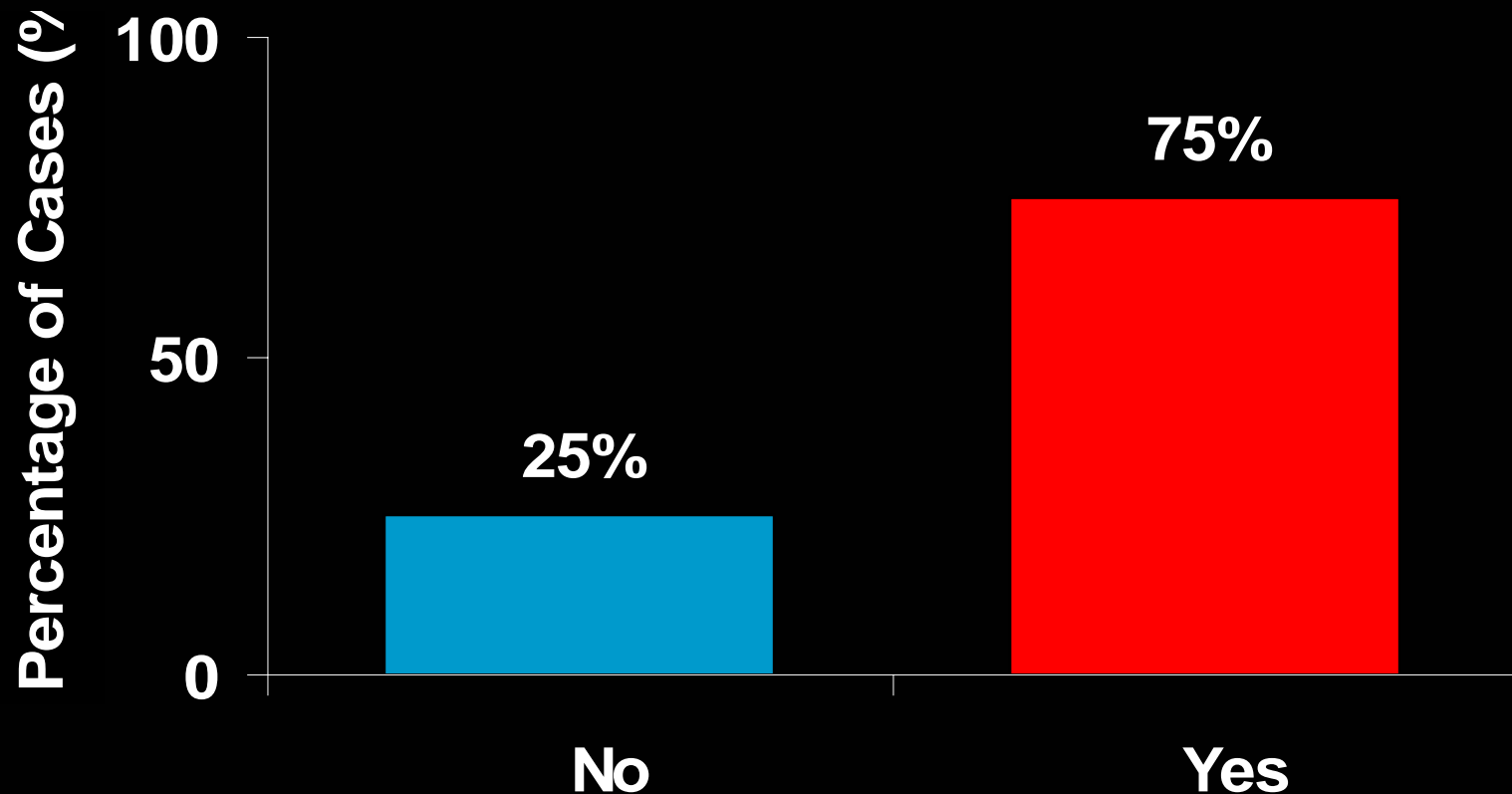
Discharged Alive (N=1372)



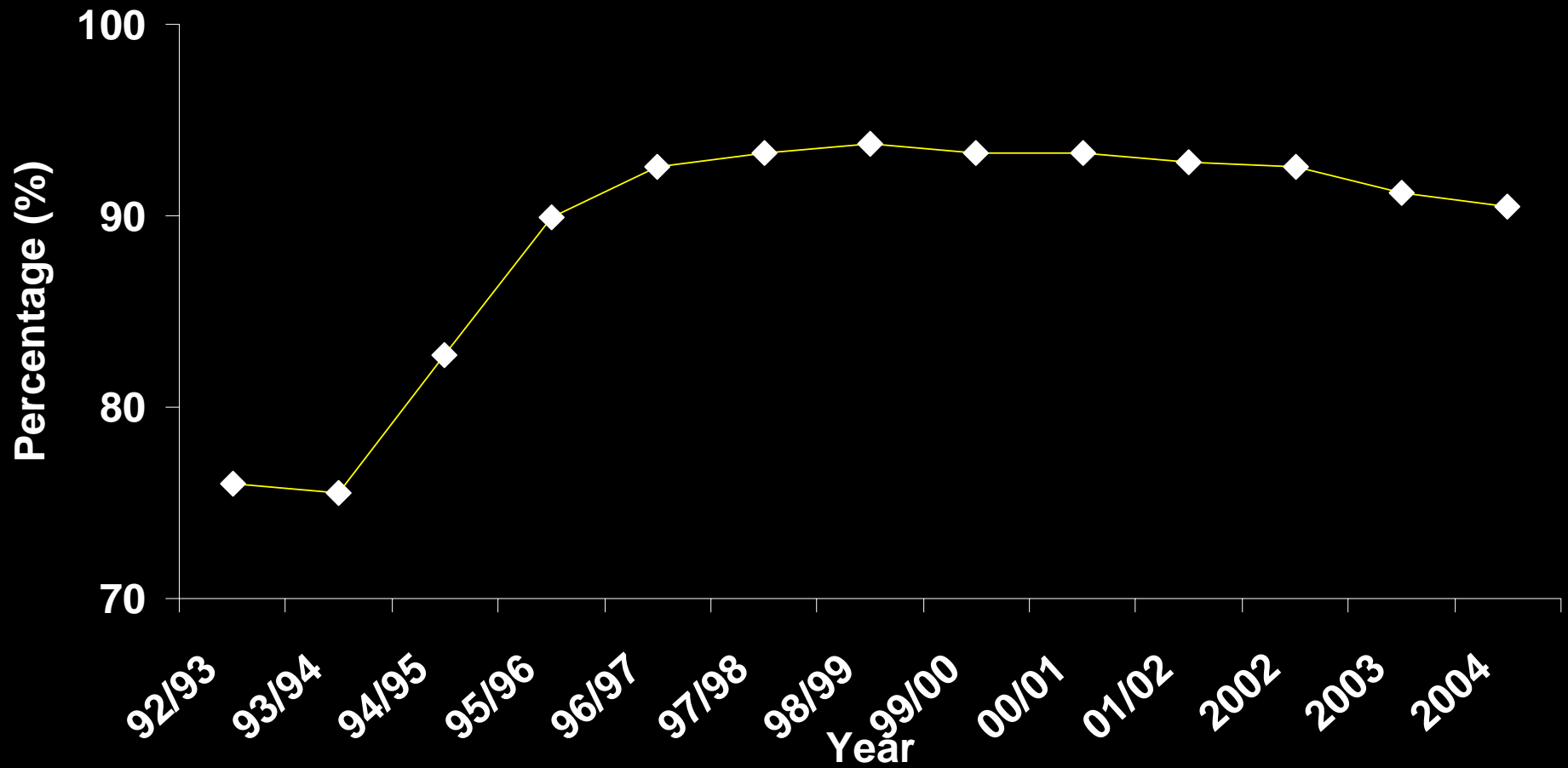
Defibrillator Response in 8 Minutes or Less (N=1,110)



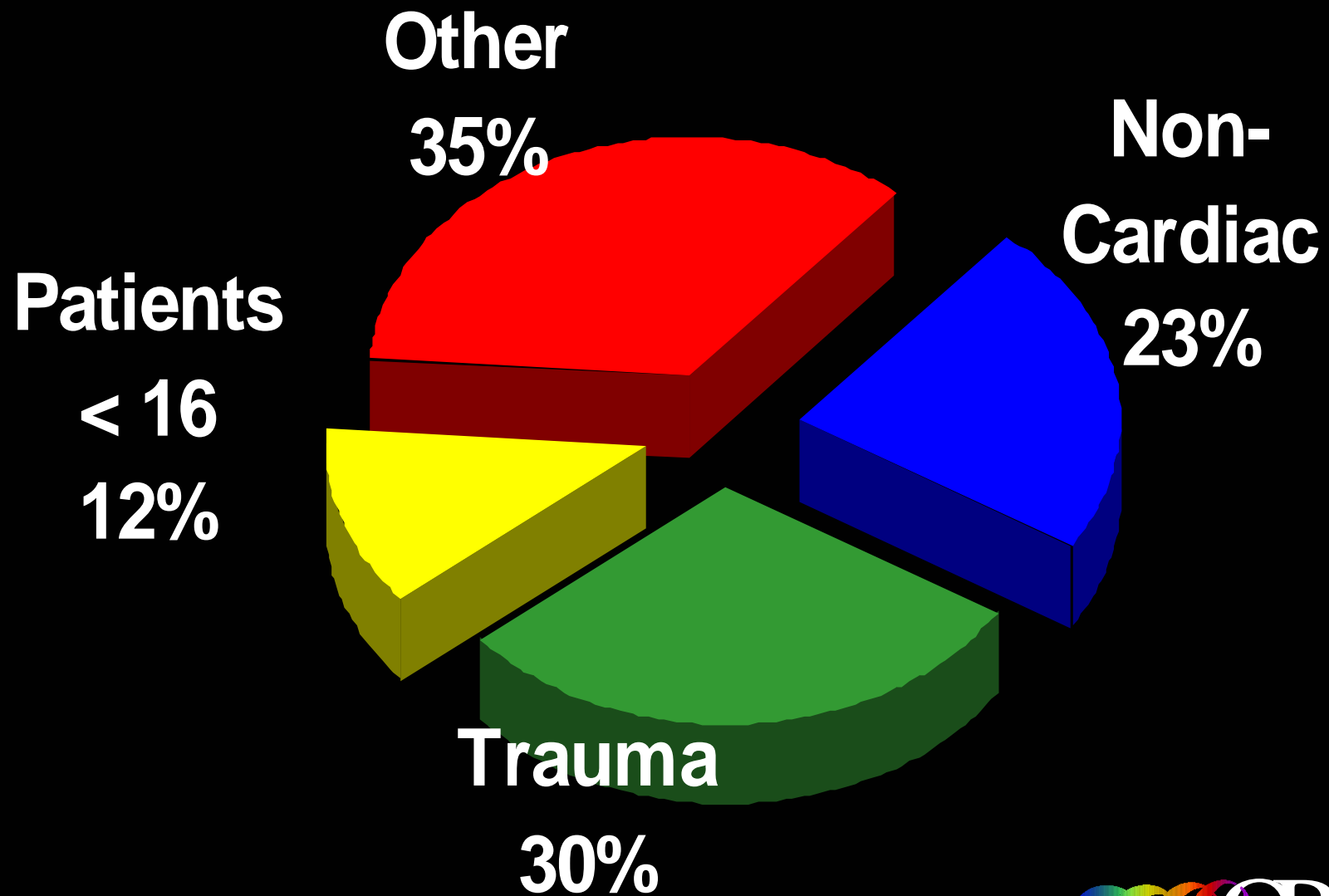
Advanced Care Paramedic Response in 11 Minutes or Less All Cases



% of Cases with Defibrillator Arrival at Scene 8 Min or Less (by Year)



Excluded Cases (N=150)



Initial Rhythm (N=1,183)

