

**Outcomes of  
out-of-hospital cardiac  
arrest  
in KOREA**

# Backgrounds 3-1

## Out-of-hospital Utstein style

*Circulation 1991;84(2):960-975.*

## Outcomes

### ROSC

In Osaka **35.9%**

*Resuscitation 2002;53:121-125.*

In KOREA **55.0%** (2002), **42.3%** (1999)

*2002;13:428-433.*

*1999;10:370-378.*

# Backgrounds 3-2

Survival discharge

By casino security **53%**

*NEJM 2000;343:1206-1209.*

By AED in flight **40%**

*NEJM 2000;343:1210-1206.*

In KOREA **20%**

*2002;13:428-433.*

# Backgrounds 3-3

## Chain of Survival



**Early  
Access**

**Early  
CPR**

**Early  
Defibrillation**

**Early  
Advanced  
Care**

Early EMT(ACLS) Dispatch

BLS to Lay person

Early resuscitation

AED, AED to Lay person

# Prehospital CPR in KOREA



“119”

Redcross



Emerg. center



# Methods

## KRCPR

*(Korean registry of CPR:out-of-hospital)*

- Duration: 2004.10.1. - 2005.2.28
- Hospital: 28
- Protocol: Out-of-hospital Utstein style
- Case: 329

# RESULTS 1-General

- M:F = 2.5 : 1 (234 : 95)
- Mean AGE 55.3  
(min. 1 mo / max. 92 yr)

# RESULTS 2-collapse

- Location

home 181 > public 39 > street 36 >  
other 33 > office 22

- Witness

family 185 > bystander 79 > non 28 > EMT 15

- Witness CPR 80 (26.5%)

other 36 > first responder 22 >  
family 12 > bystander 10



# RESULTS 3-early access

- EMSS activate 288 (88.6%)
- Transport  
119 285 > private 16 > ambulance 9
- collapse to early access 4.3 min
- collapse to EMT 6.5 min
- collapse to ER 33.5 min

# RESULTS 4-119

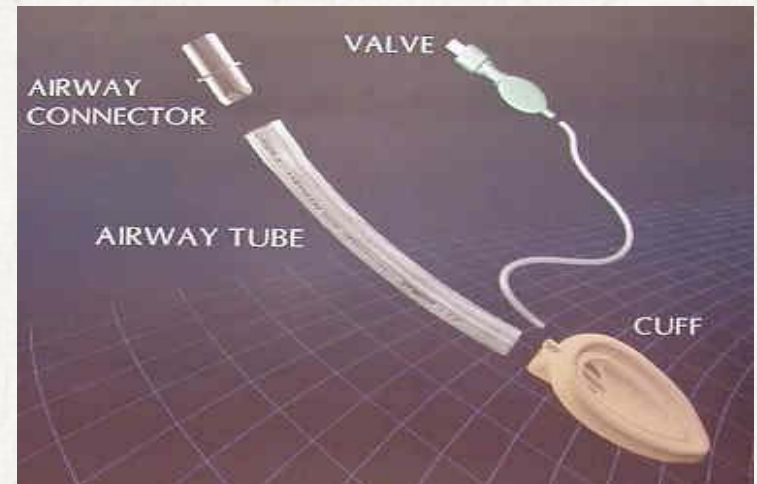
- CPR 177 (60.6%)

Intubation 19

AED shock 13

IV access 3

Drug 1



# RESULTS 5-cause/rhythm

- Cause

cardiac 176 > non cardiac 111 >  
trauma 35

- Initial rhythm

asystole 211 > PEA 88 > VT/VF 35

# RESULTS 6-outcome

- ROSC 46.1 %
  - No ROSC 164
  - 24 hr death 61
  - In-hospital death 32
  - Hopeless discharge 6
  - Survival discharge 14
  - Admission 27

# Conclusion I

## **BROKEN** Chain of Survival

329



**Early  
Access**  
4.3

**Early  
CPR**  
13.8

**Early  
Defibrillation**

**Early  
Advanced  
Care**

33.5

# Conclusion II

1. BLS education for Bystander  
CPR
2. AED by out-of-hospital EMSS
3. CPR by out-of-hospital EMSS