





# **AVALANCHE ACCIDENT**

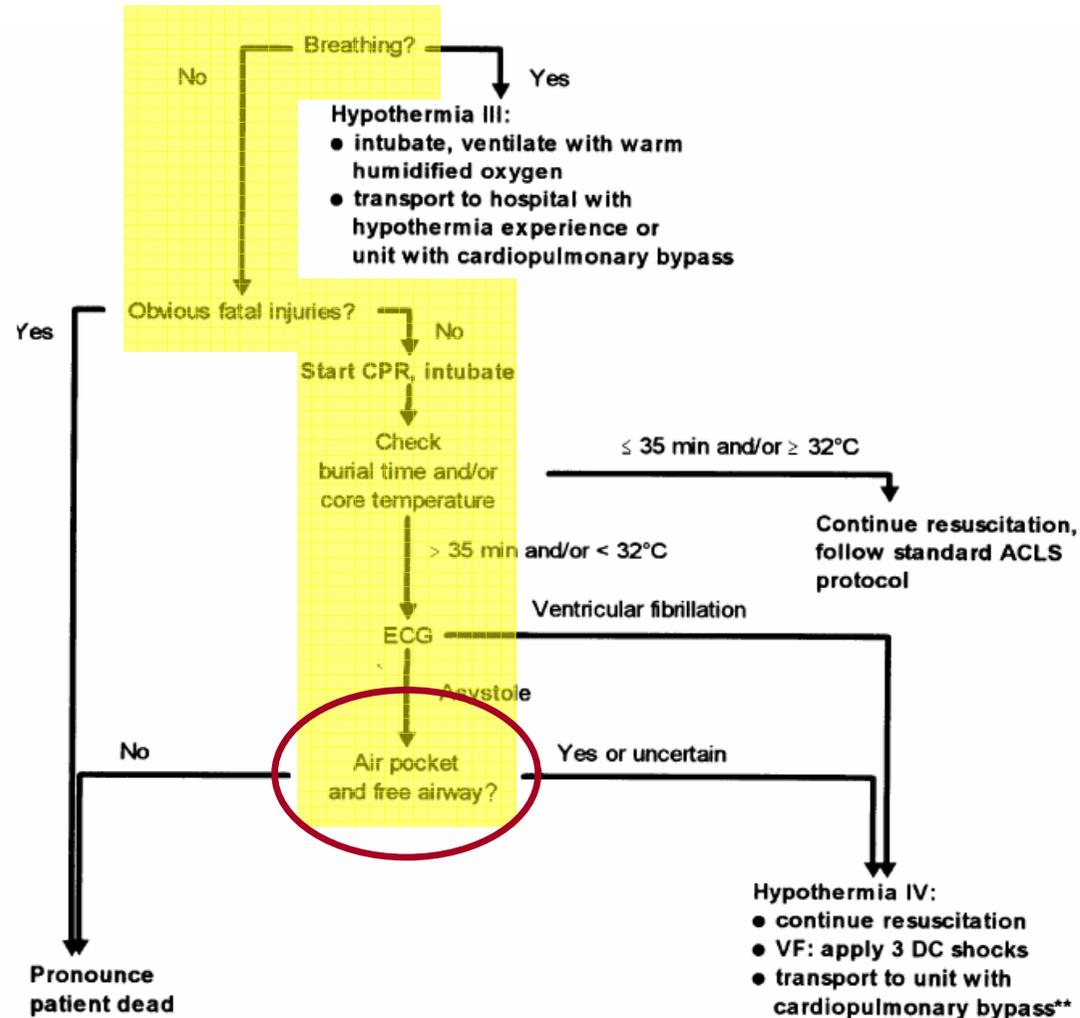
## **ILCOR Guidelines 2010**

## **ICAR MEDCOM algorithm 2011**

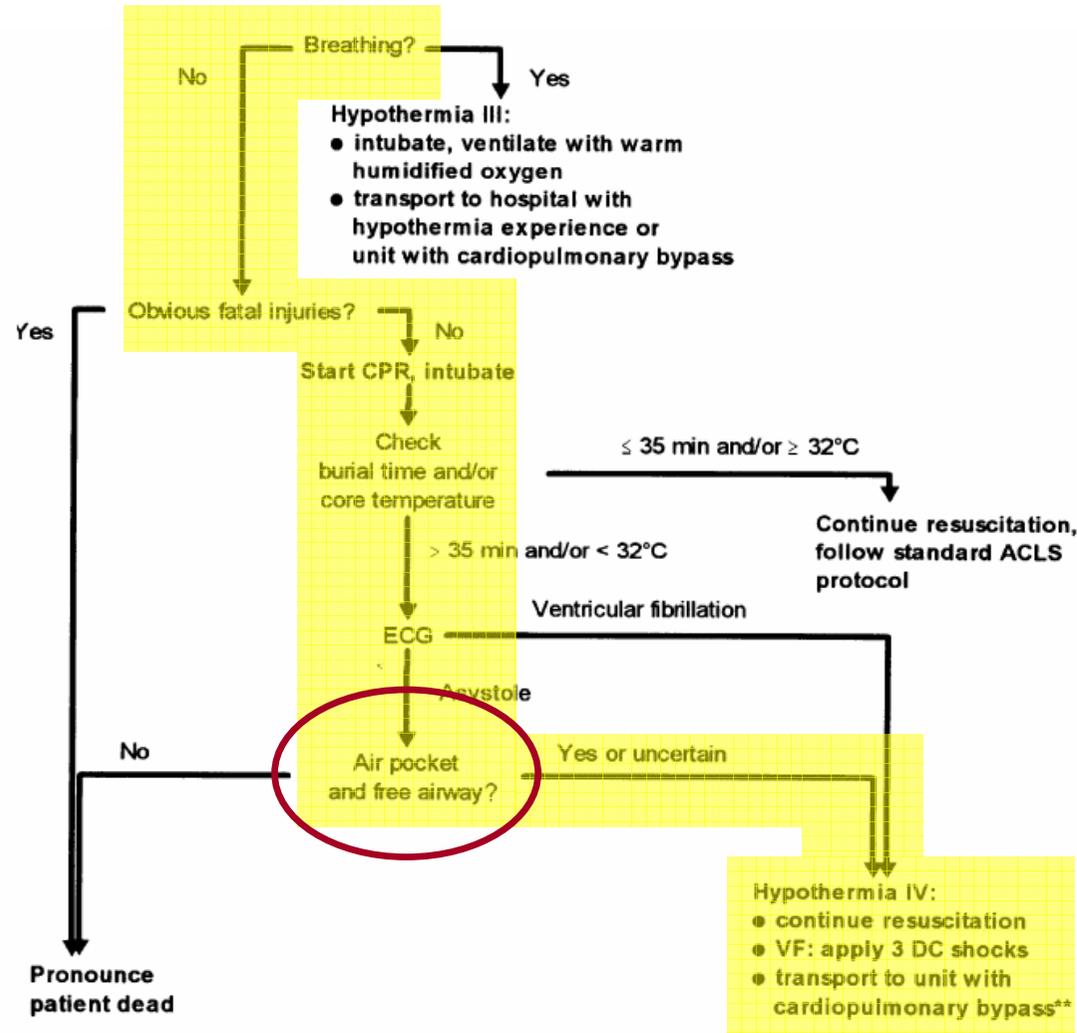


Hermann Brugger

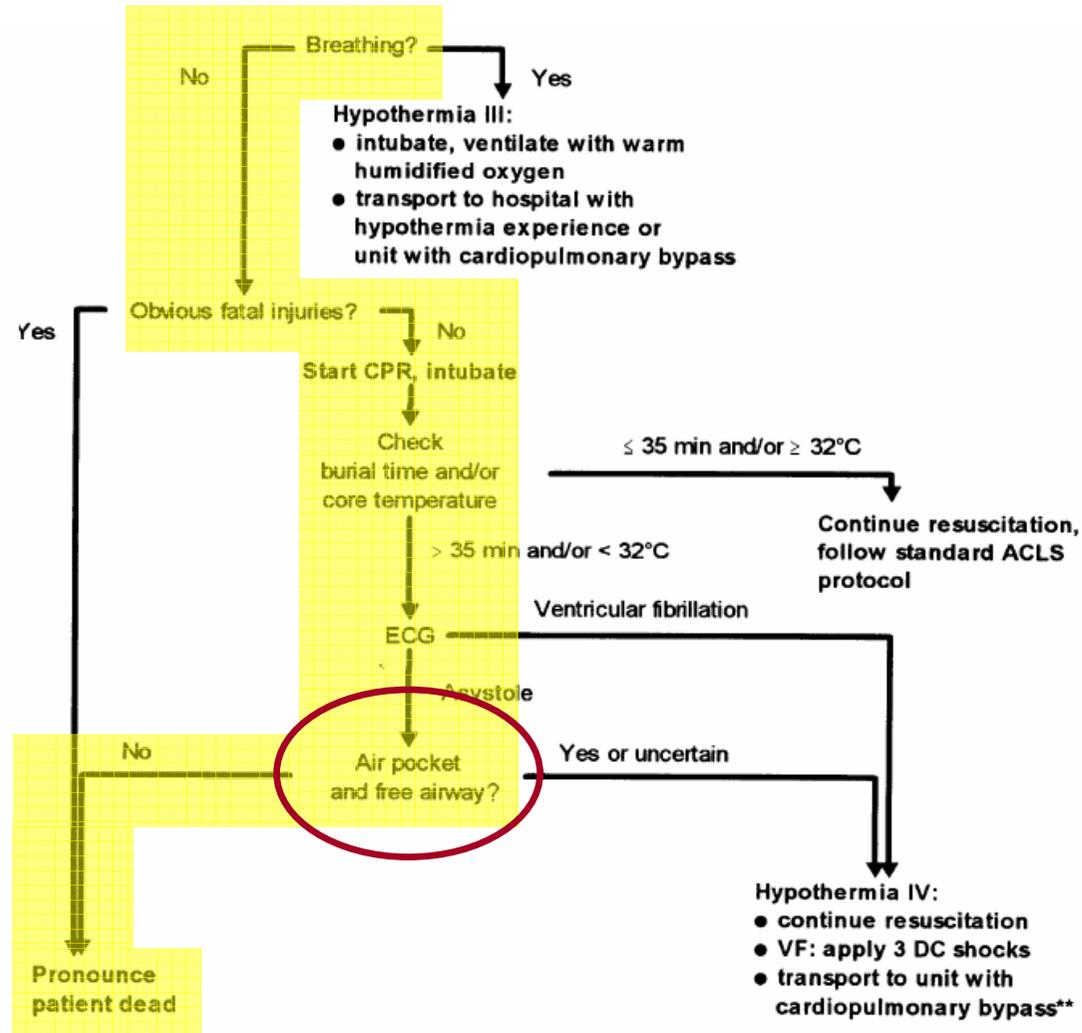
# ICAR MEDCOM recommendations 1996/2001



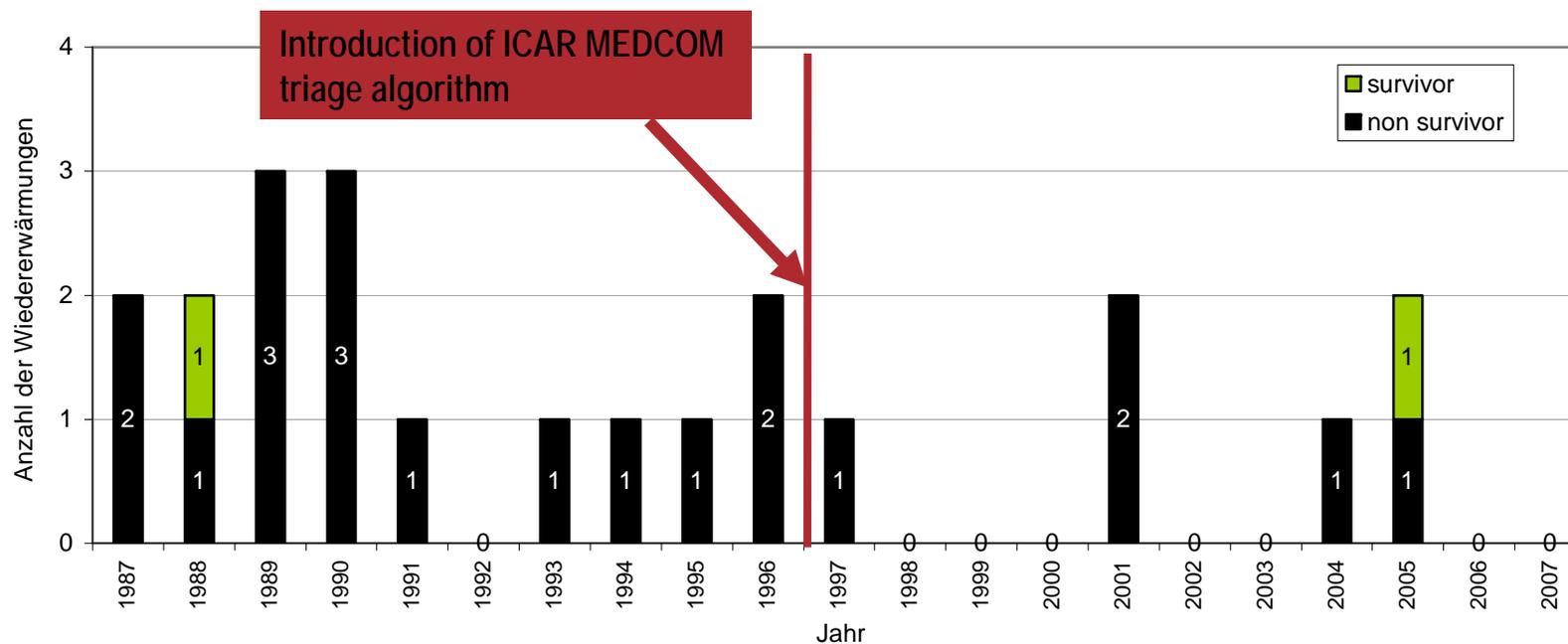
# ICAR MEDCOM recommendations 1996/2001



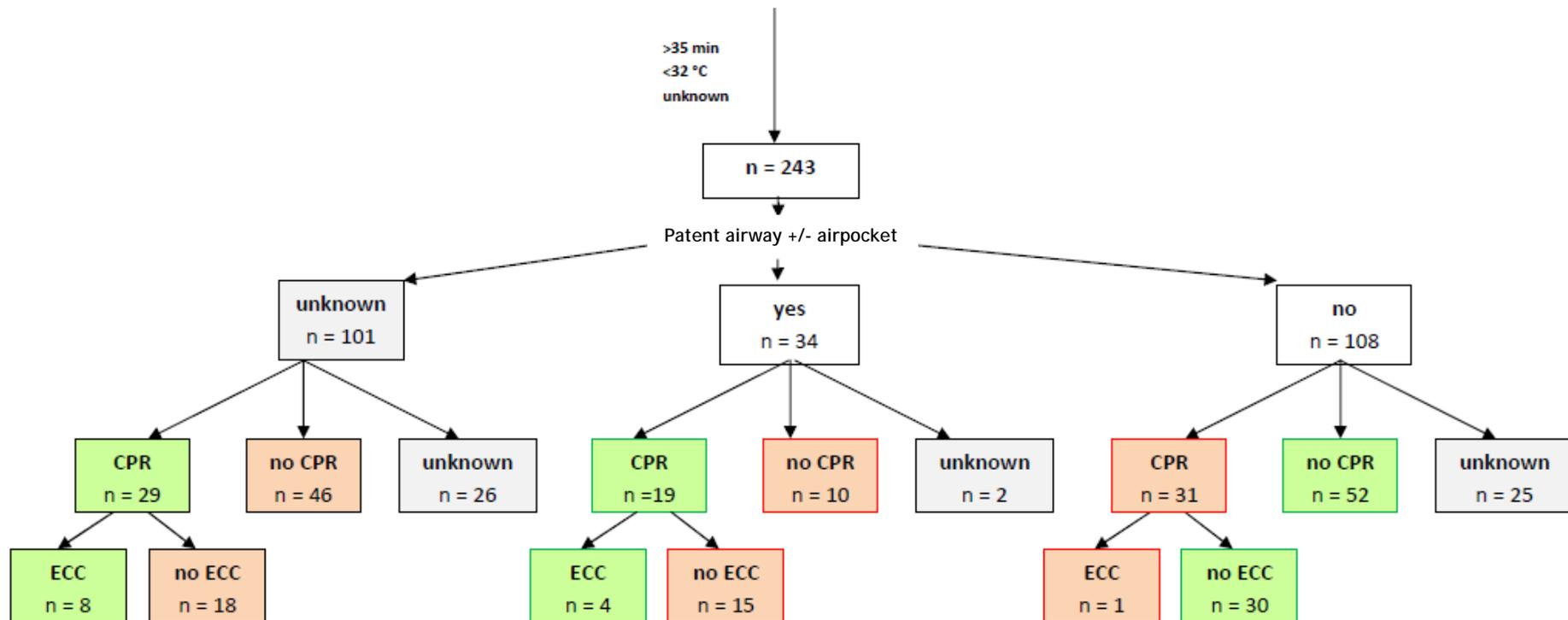
# ICAR MEDCOM recommendations 1996/2001



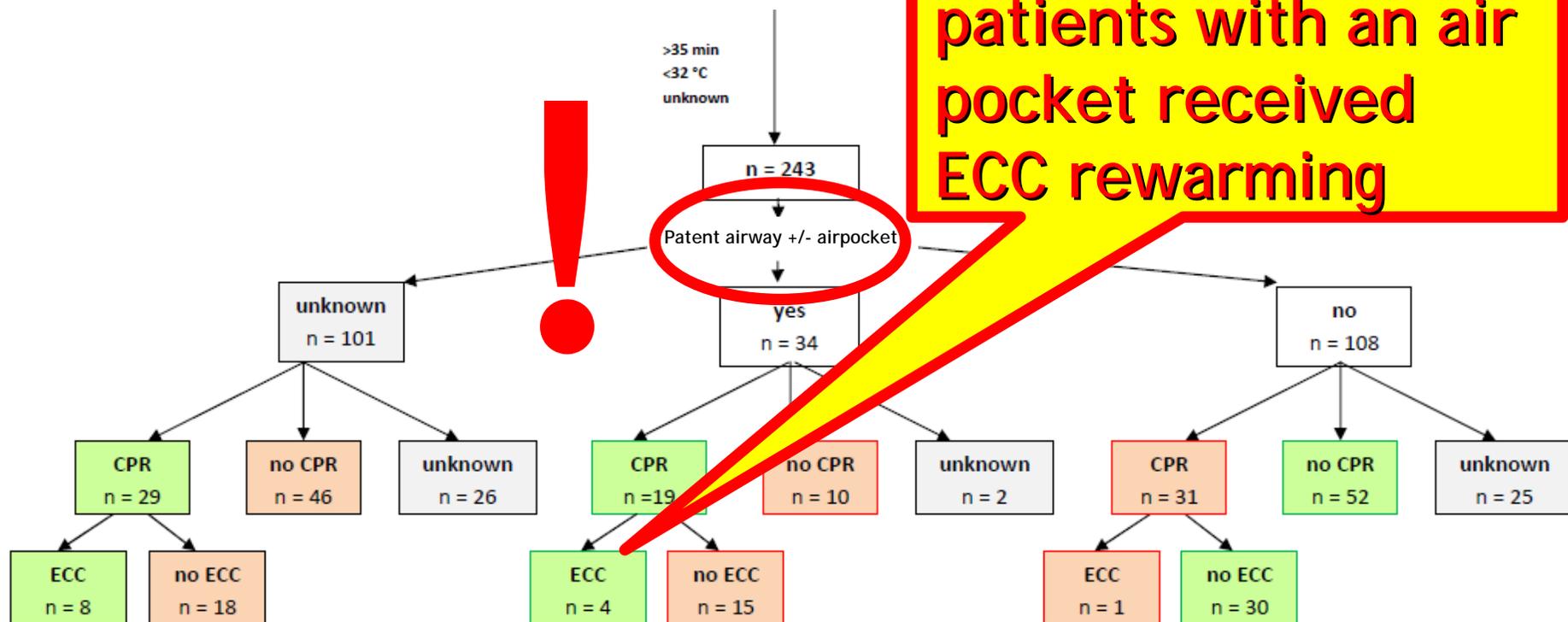
# Incidence of avalanche victims with OHCA rewarmed with ECC in Tyrol (A) 1987-2007



# Compliance on ICAR MEDCOM recommendations for avalanche victims with OHCA in Tyrol (A) 1987-2007



# Compliance on ICAR MEDCOM recommendations for avalanche victims with OHCA in Tyrol (A) 1987-2007



# European Resuscitation Council Article of the month June 2010

 European Resuscitation Council

Dear Peter,

The June Free Article of the Month is:  
[Prognostic factors in avalanche resuscitation: A systematic review](#)  
(Jeff Boyd, Hermann Brugger, Michael Shuster)



Contents lists available at ScienceDirect

 ELSEVIER

Resuscitation

journal homepage: [www.elsevier.com/locate/resuscitation](http://www.elsevier.com/locate/resuscitation)

## Review

### Prognostic factors in avalanche resuscitation: A systematic review<sup>☆</sup>

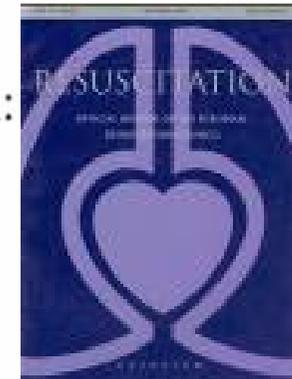
Jeff Boyd<sup>a,b,\*</sup>, Hermann Brugger<sup>c,d</sup>, Michael Shuster<sup>a</sup>

<sup>a</sup> Department of Emergency Medicine, Mineral Springs Hospital, Banff, AB, Canada

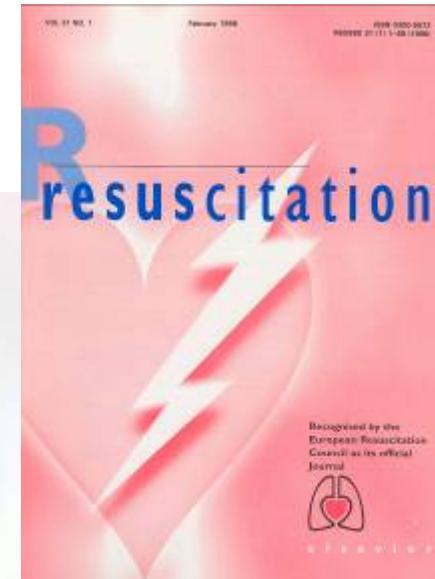
<sup>b</sup> International Federation of Mountain Guides, Banff, Alberta, Canada

<sup>c</sup> EURAC Institute of Mountain Emergency Medicine, Bozen/Bolzano, Italy

<sup>d</sup> Innsbruck Medical University, Innsbruck, Austria



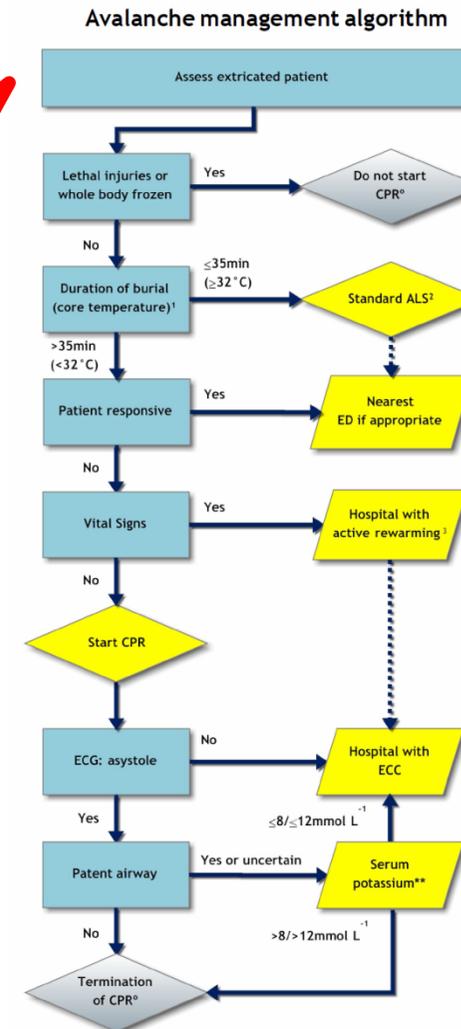
# AHA & ERC CoSTR Guidelines ILCOR 2010



# ICAR MEDCOM recommendations 2011

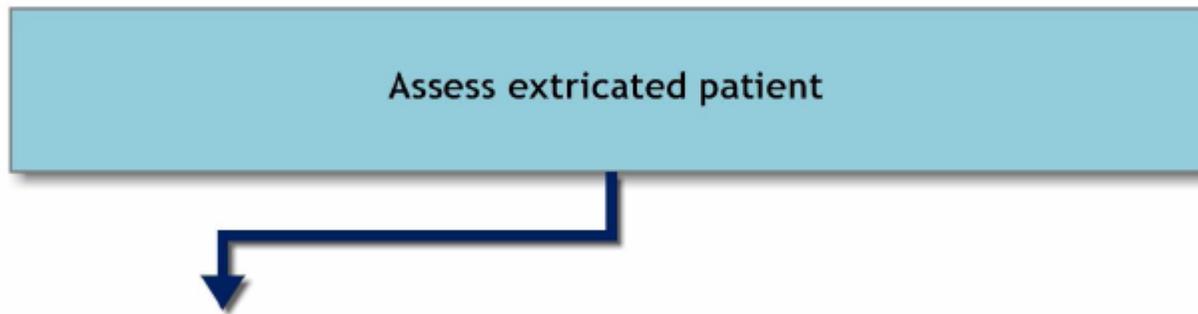
Intended for use by  
physicians and  
other advanced life  
support skilled  
clinicians

Hermann Brugger, Jeff Boyd,  
Fidel Elsensohn, Peter Paal,  
Giacomo Strapazon, Eveline  
Winterberger, Ken Zafren



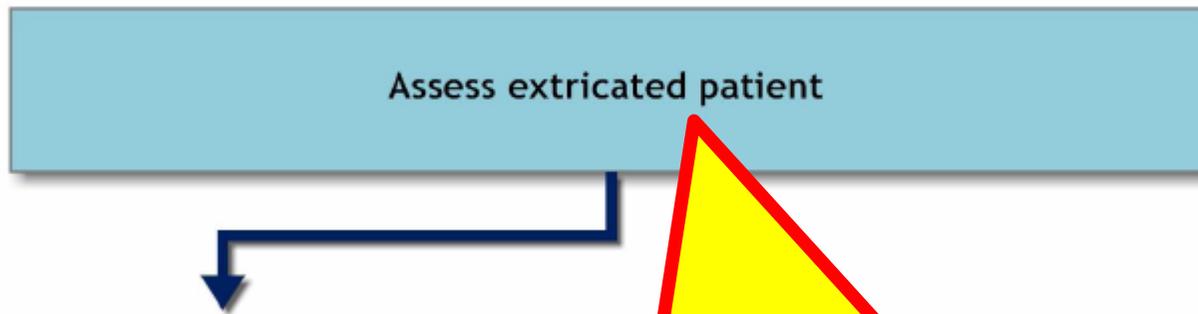
# ICAR MEDCOM recommendations 2011

## Avalanche management algorithm



# ICAR MEDCOM recommendations 2011

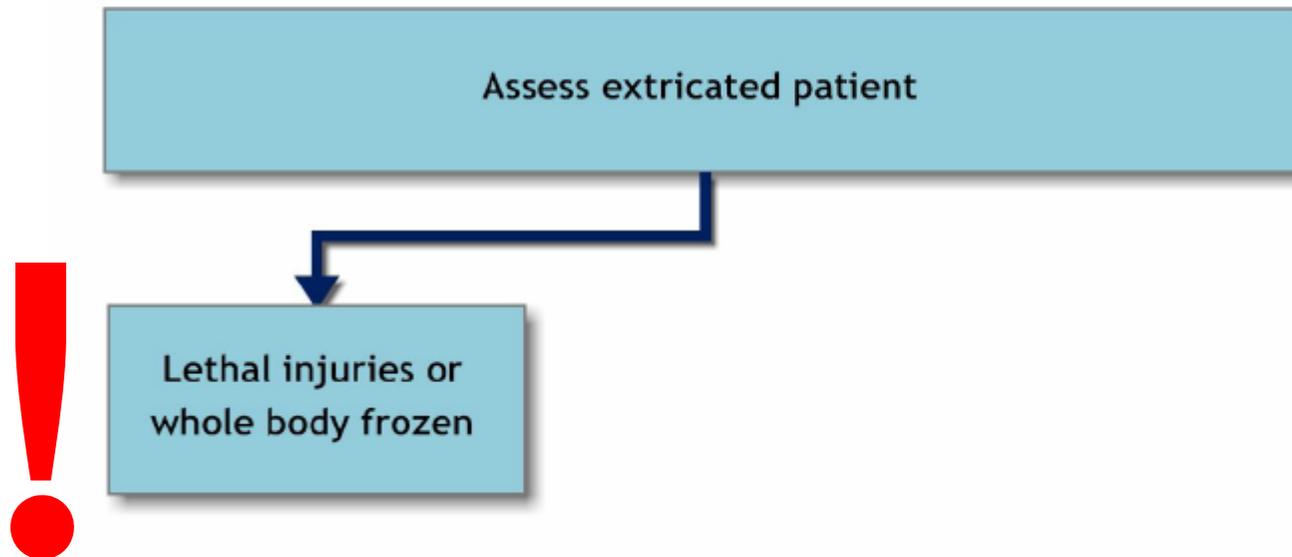
## Avalanche management algorithm



Gentle extrication. Core temperature + ECG monitoring, spinal immobilization, oxygen, insulation, hot packs on trunk; intravenous or intraosseous line only if within a few minutes; trauma treatment if indicated.

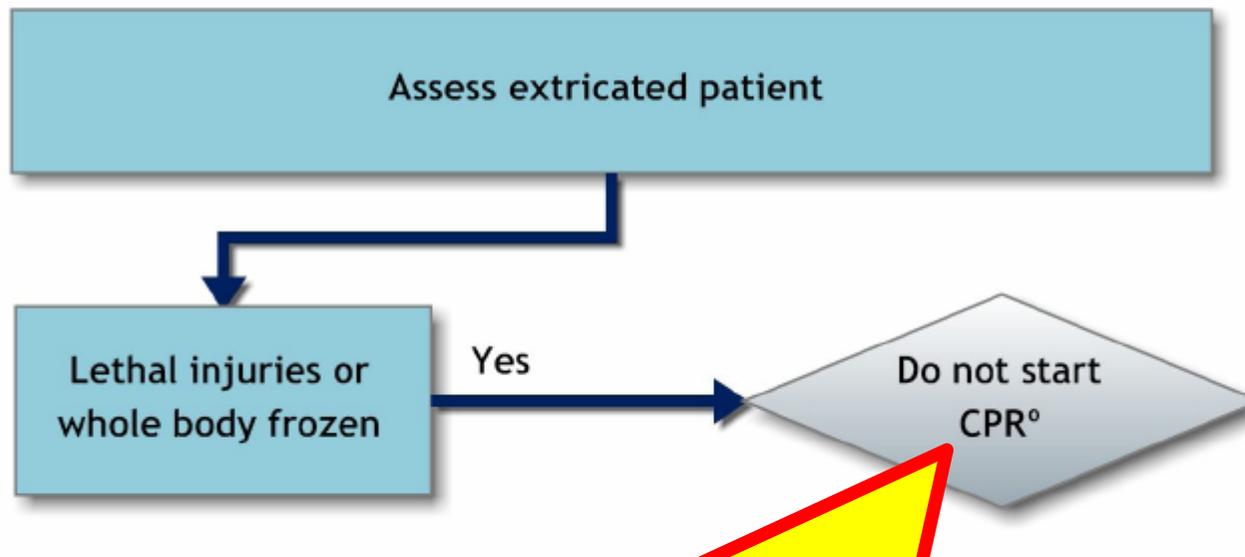
# ICAR MEDCOM recommendations 2011

## Avalanche management algorithm



# ICAR MEDCOM recommendations 2011

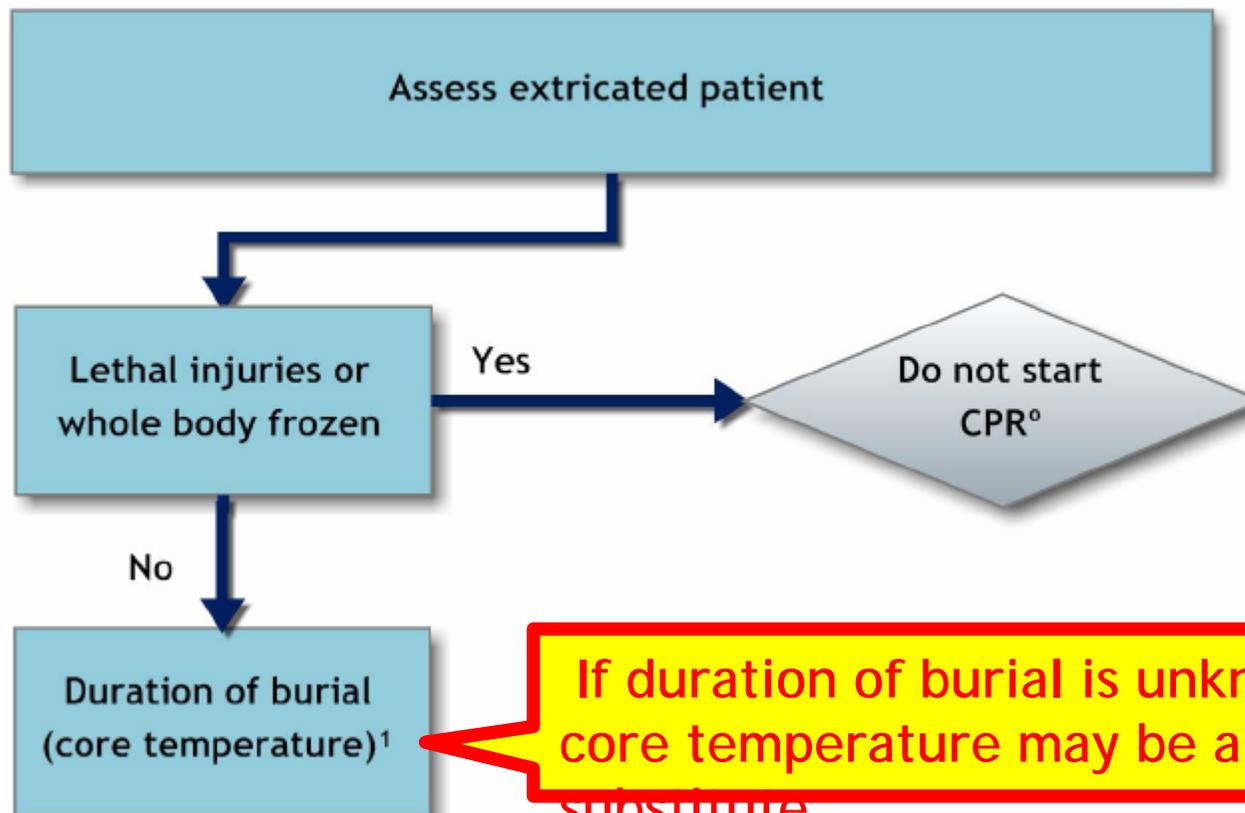
## Avalanche management algorithm



Clinicians may consider not to start or stopping CPR if it is associated with increased risk to the rescue team.

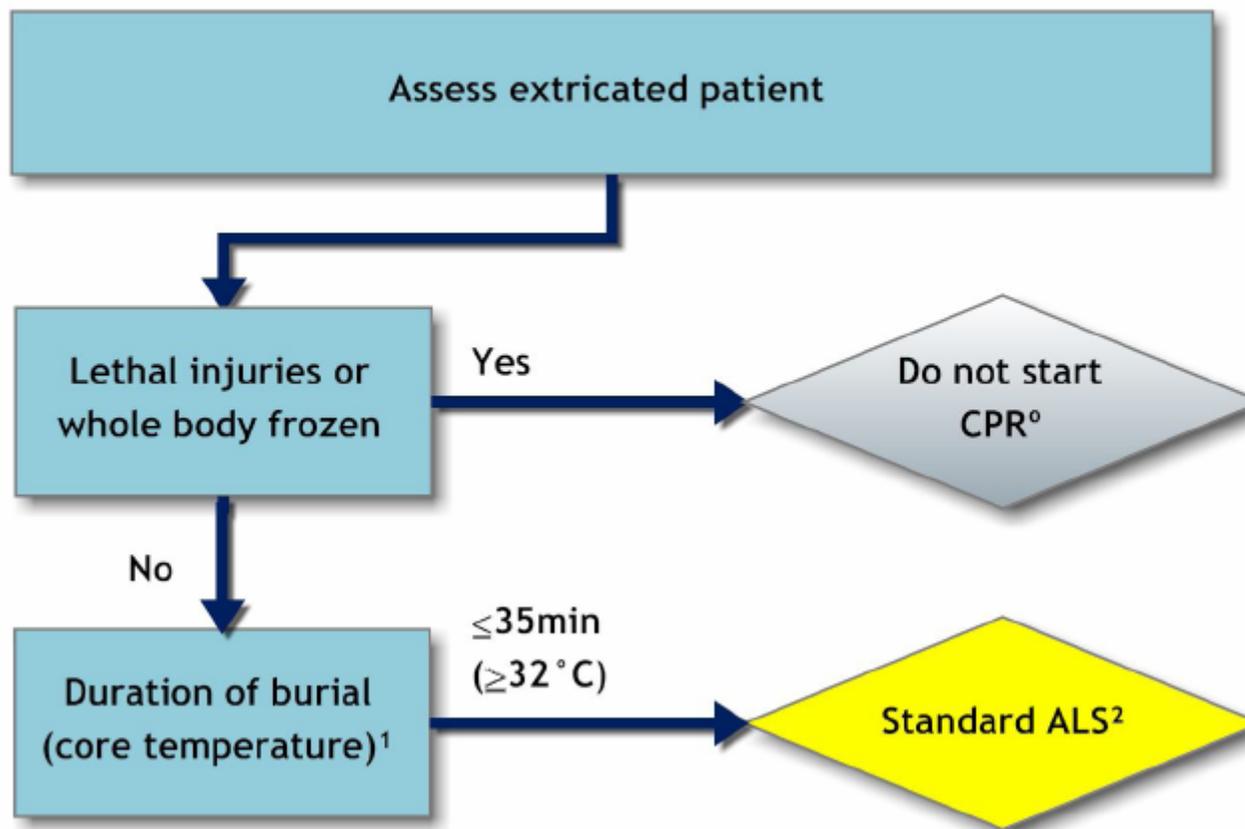
# ICAR MEDCOM recommendations 2011

## Avalanche management algorithm

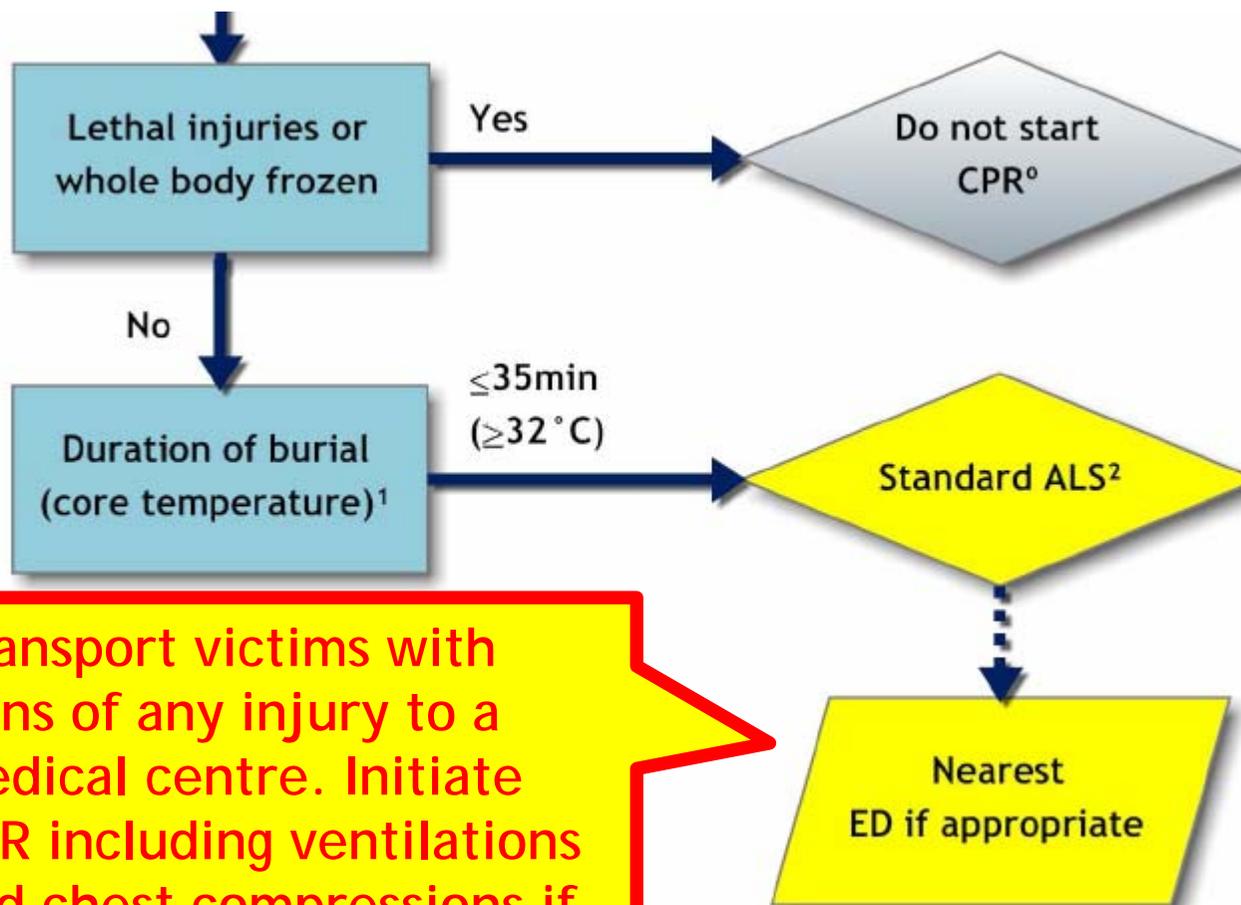


# ICAR MEDCOM recommendations 2011

## Avalanche management algorithm



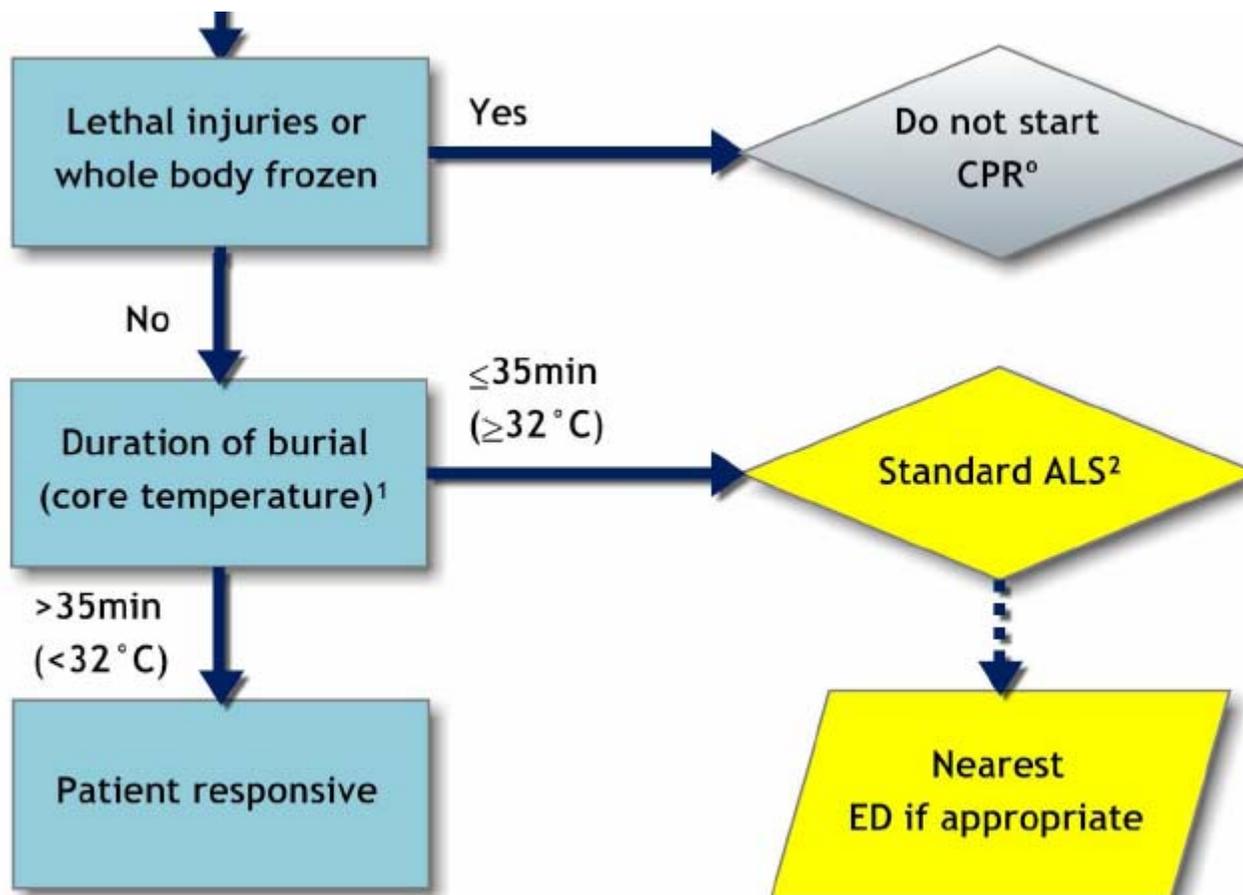
# ICAR MEDCOM recommendations 2011



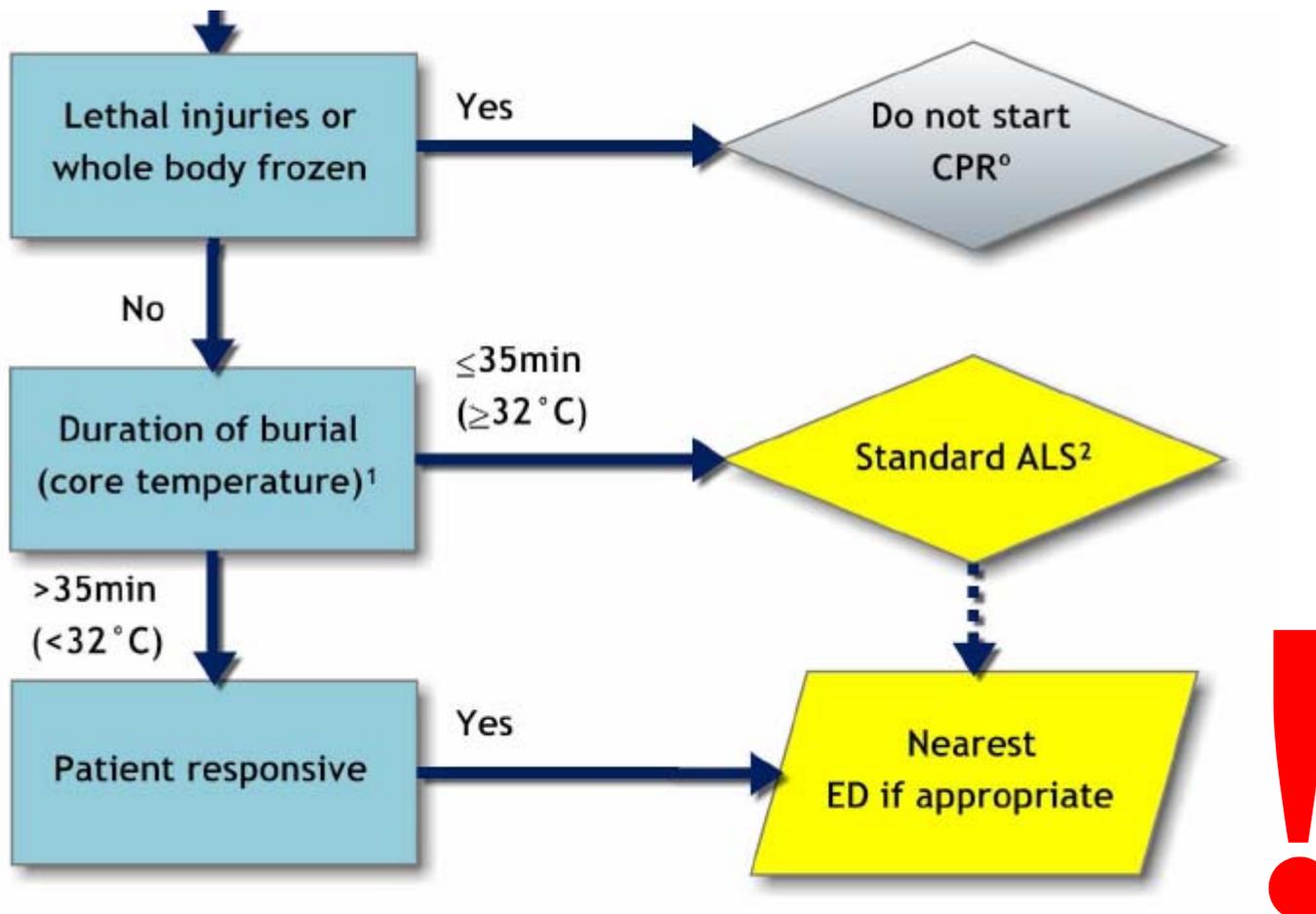
Transport victims with signs of any injury to a medical centre. Initiate CPR including ventilations and chest compressions if necessary.



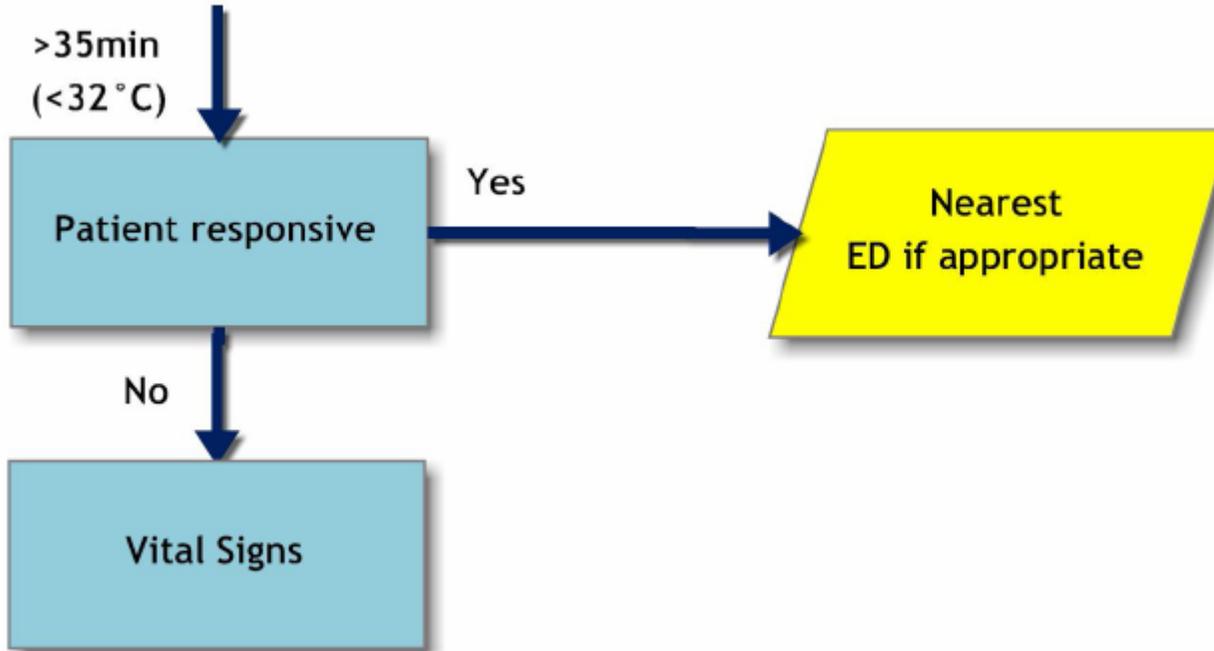
# ICAR MEDCOM recommendations 2011



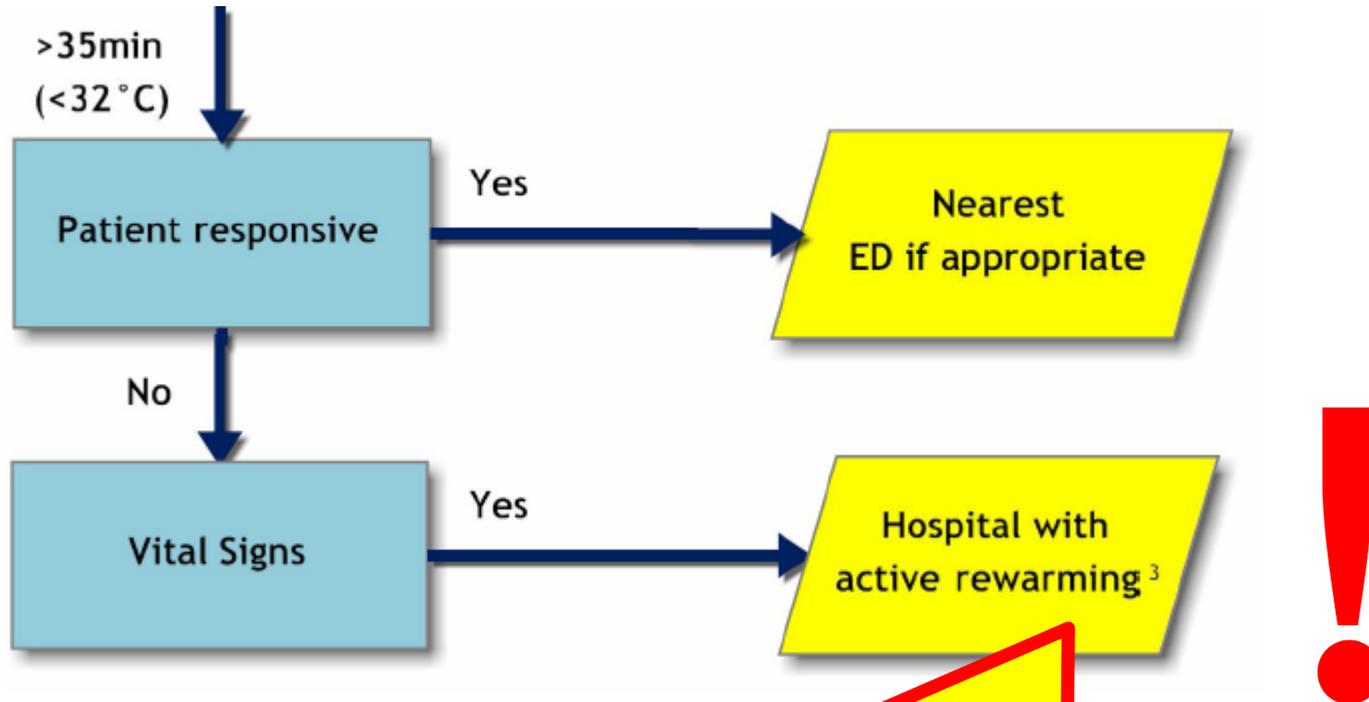
# ICAR MEDCOM recommendations 2011



# ICAR MEDCOM recommendations 2011

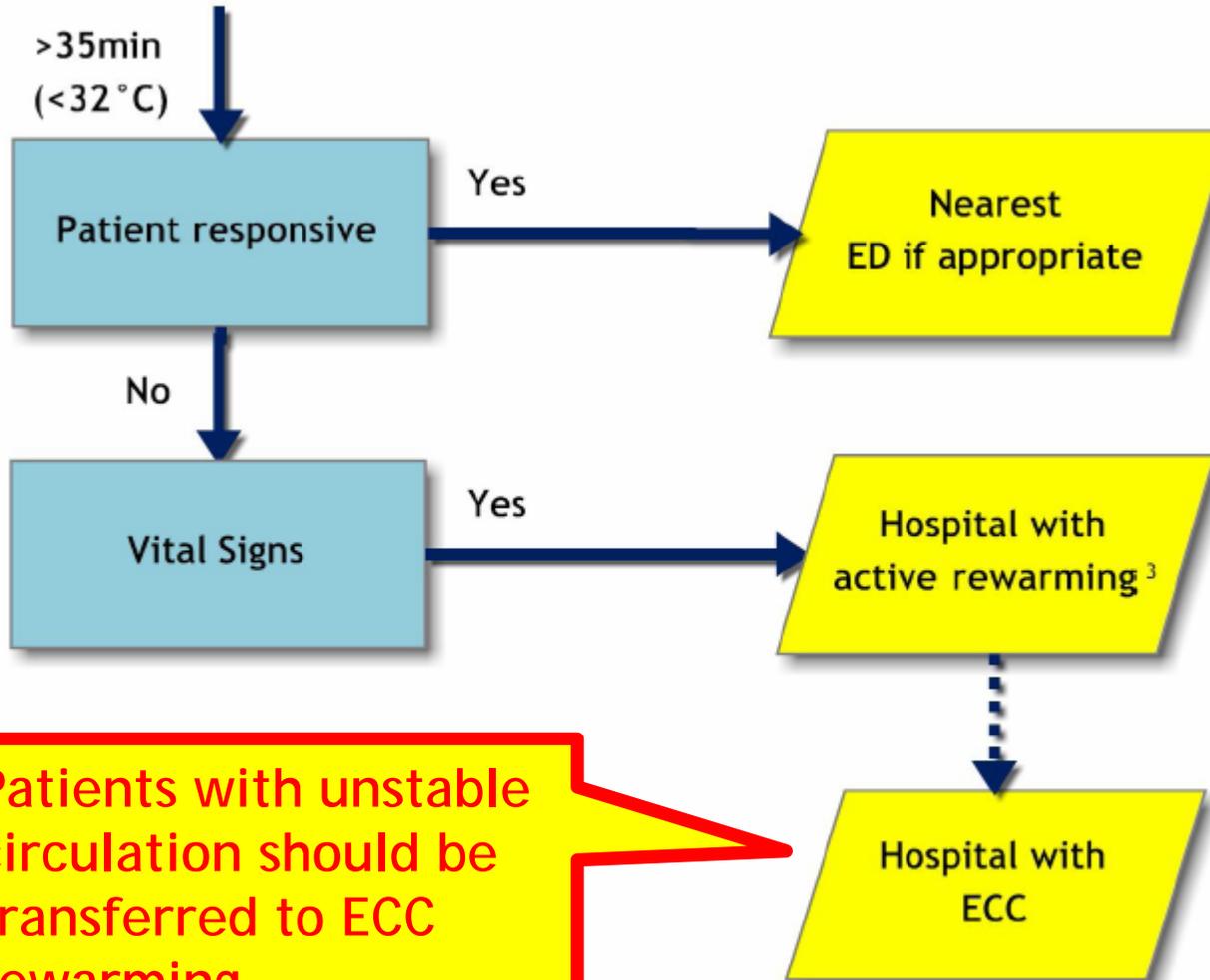


## ICAR MEDCOM recommendations 2011



Hospital capable of active rewarming such as forced air or internal rewarming.

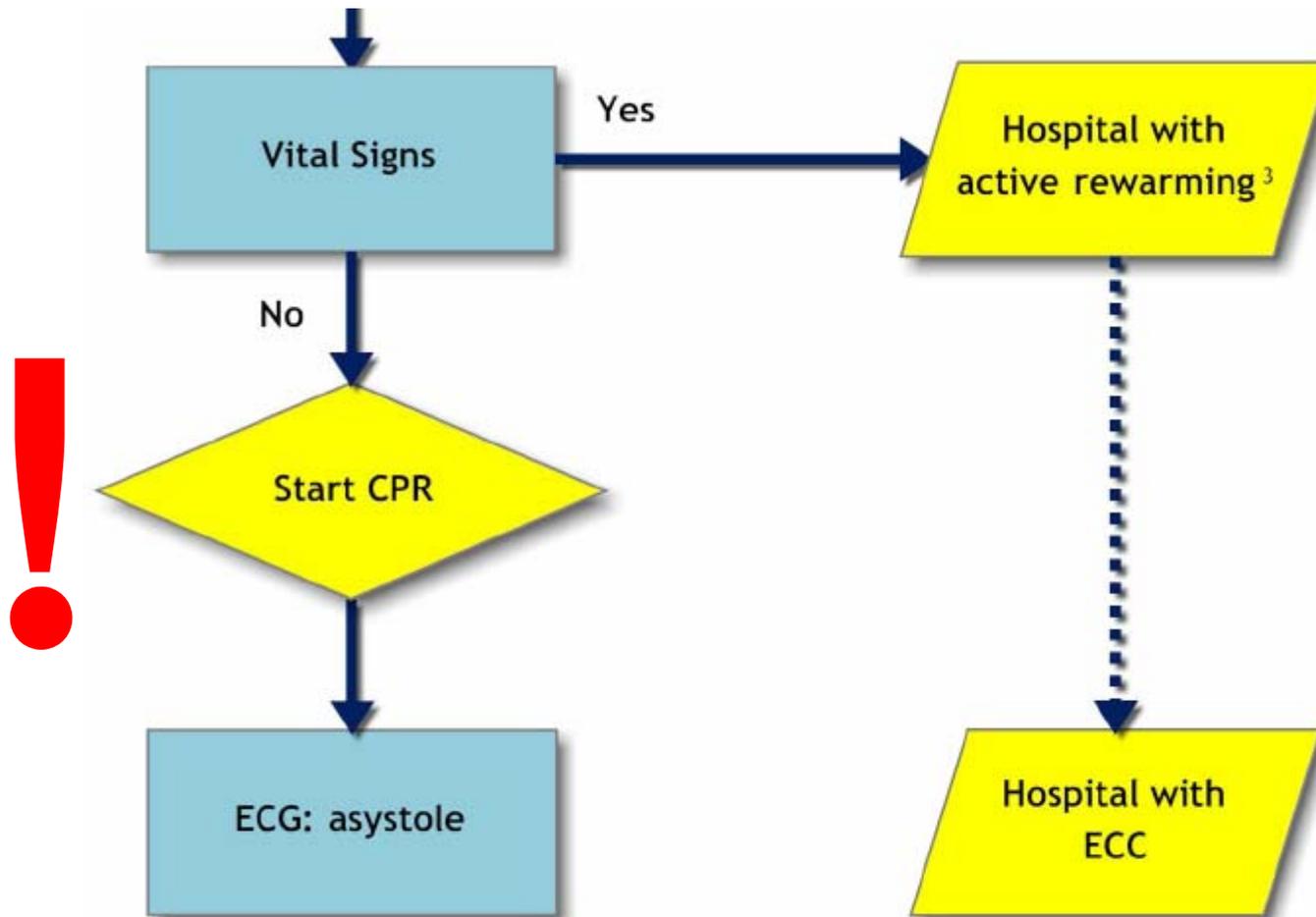
## ICAR MEDCOM recommendations 2011



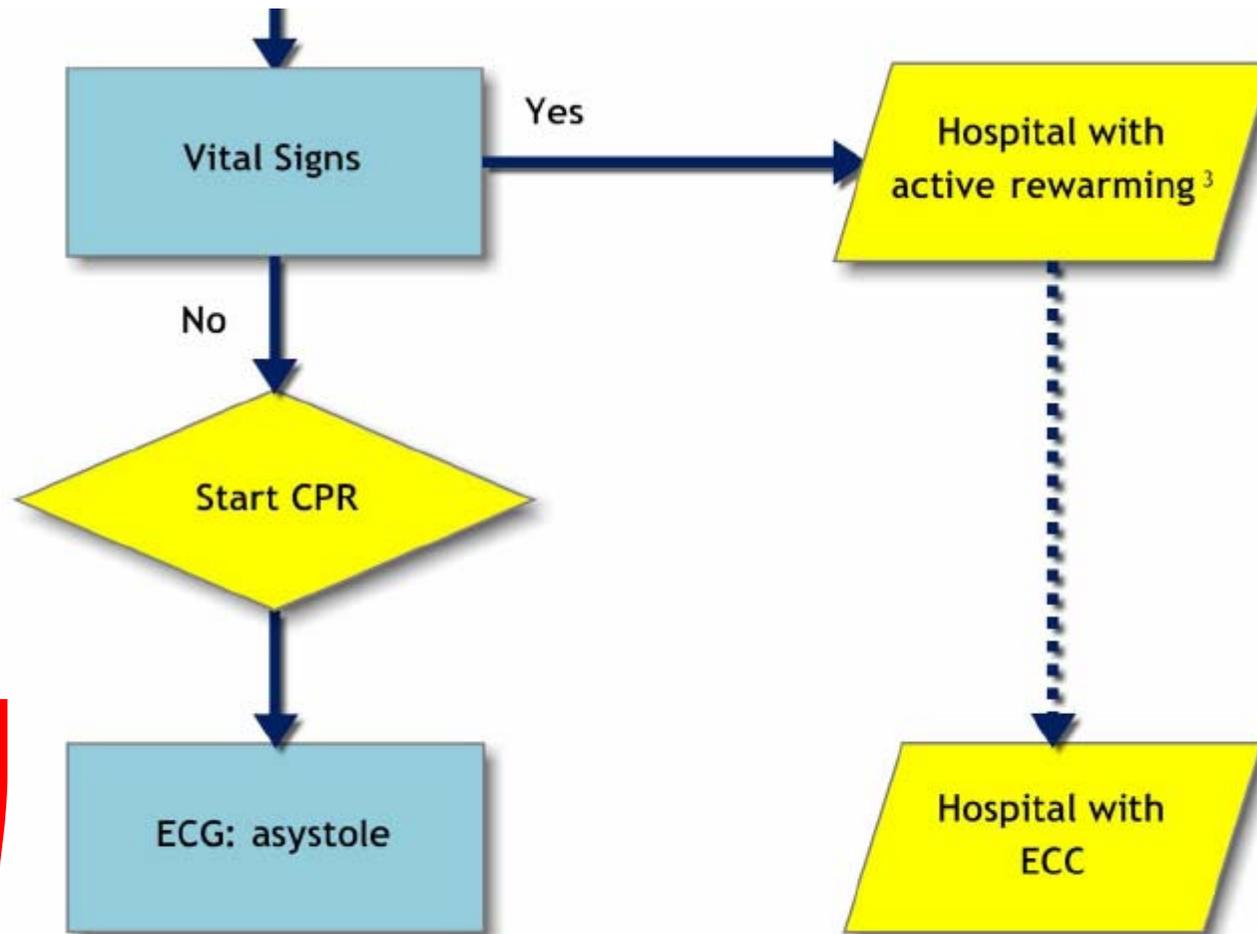
Patients with unstable circulation should be transferred to ECC rewarming.



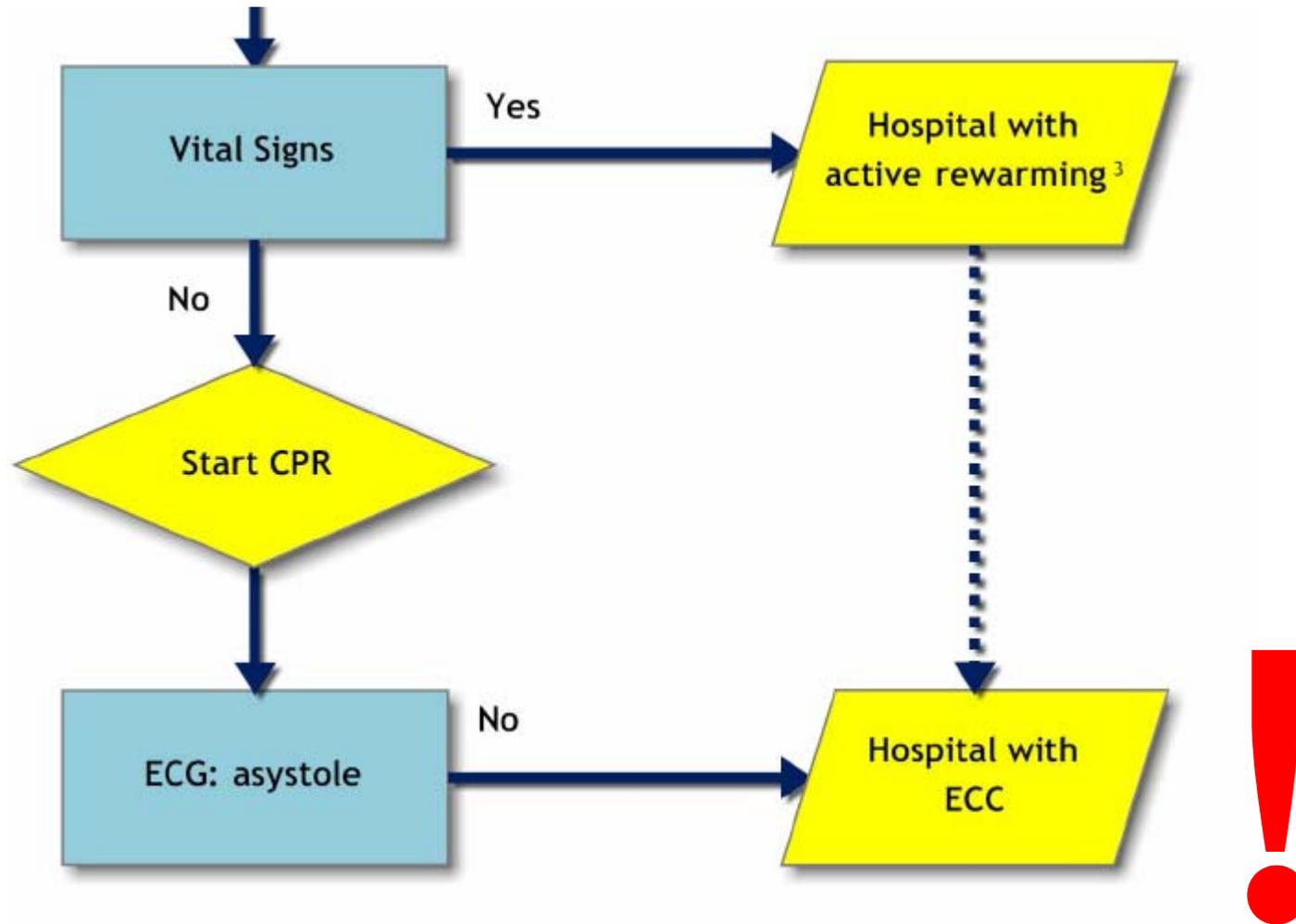
# ICAR MEDCOM recommendations 2011



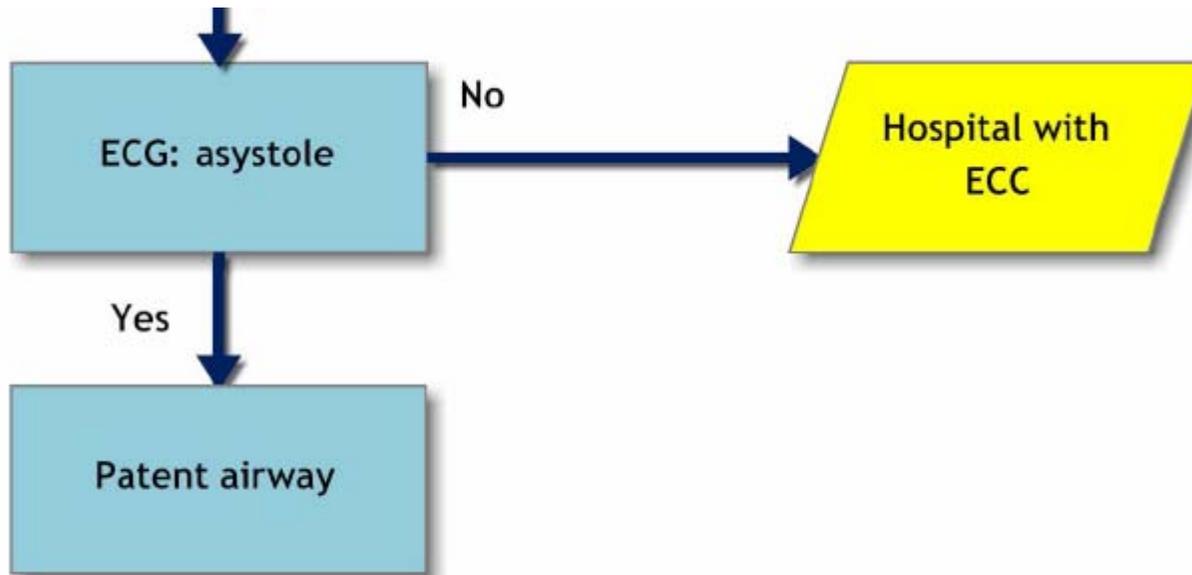
# ICAR MEDCOM recommendations 2011



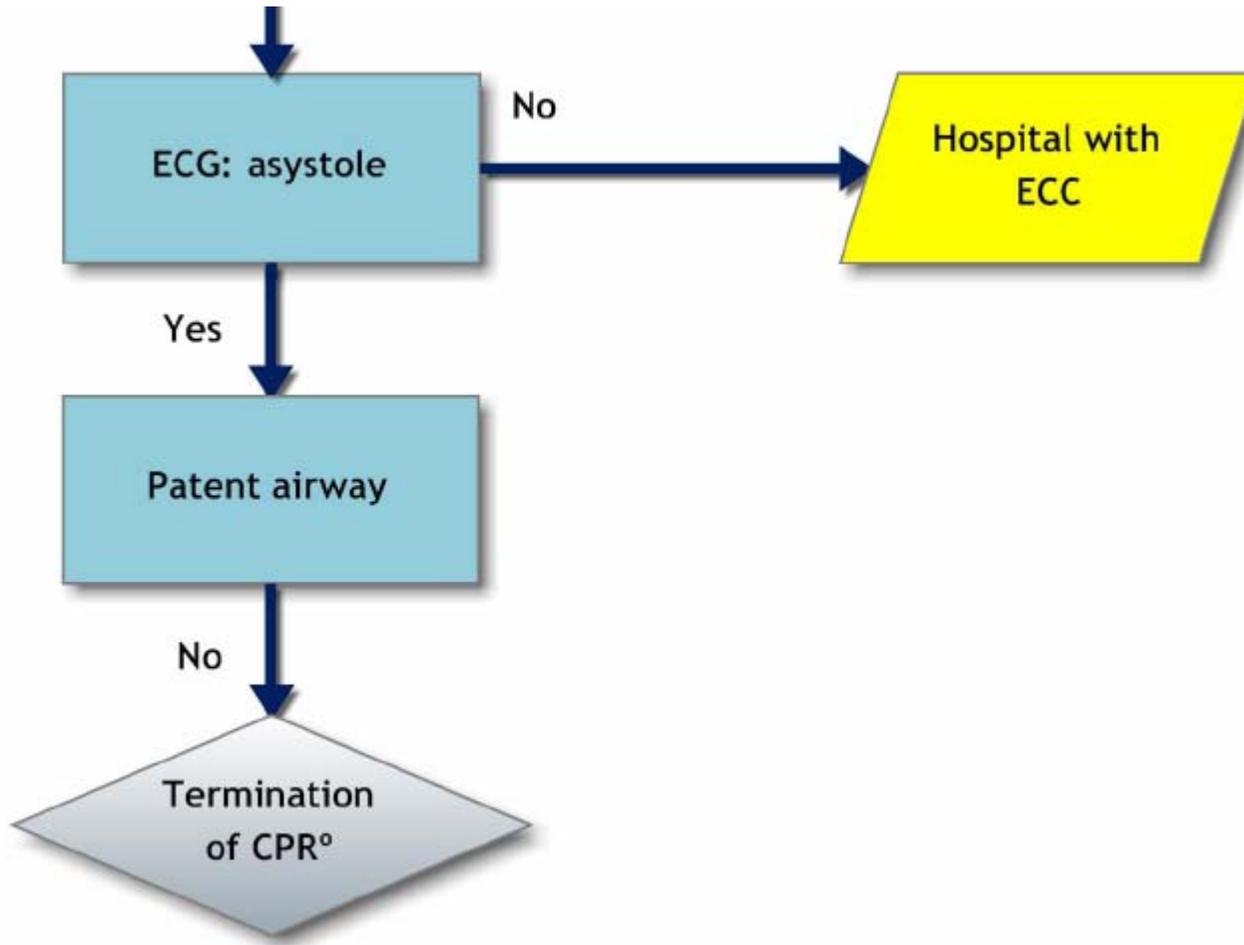
# ICAR MEDCOM recommendations 2011



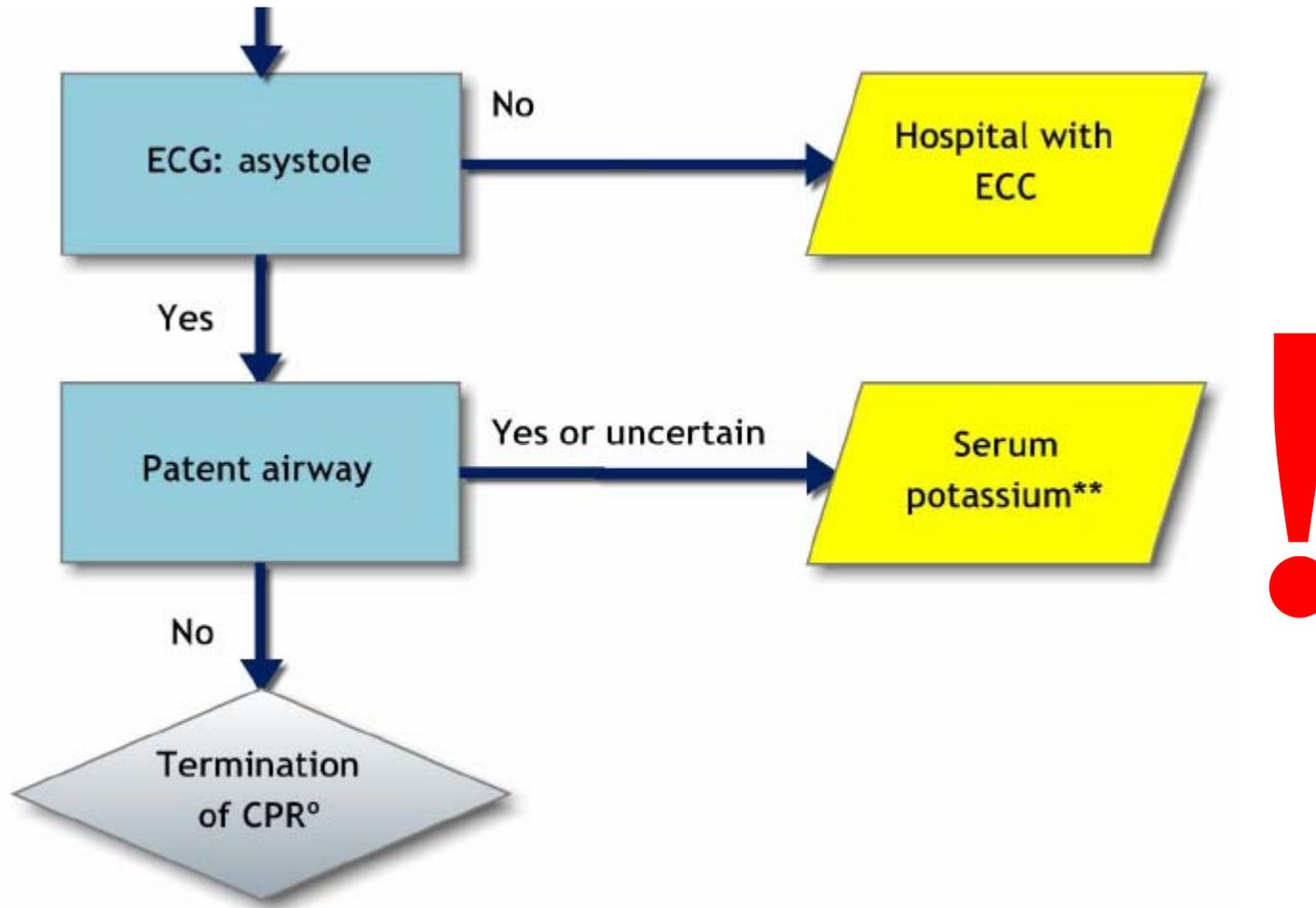
# ICAR MEDCOM recommendations 2011



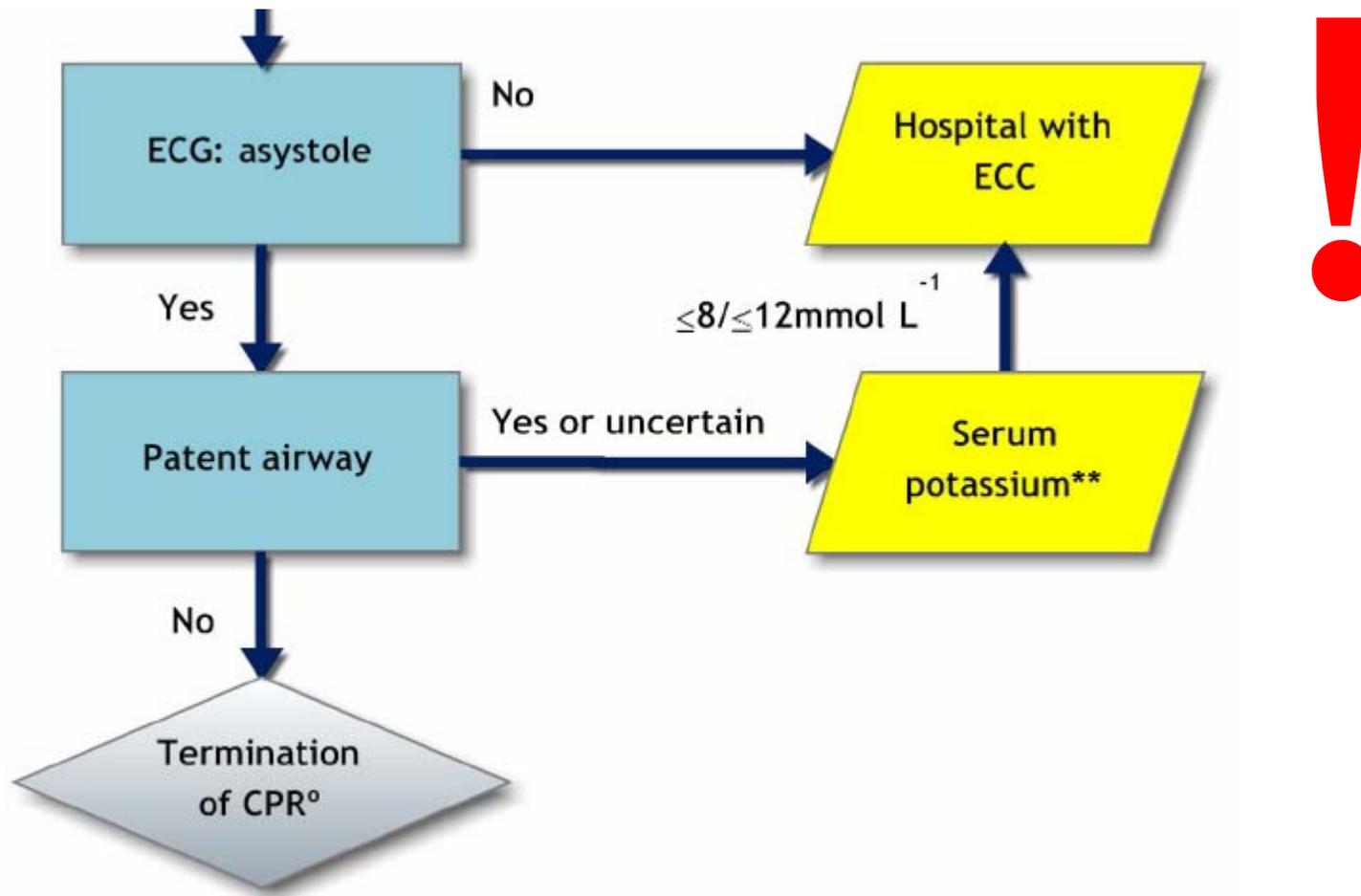
# ICAR MEDCOM recommendations 2011



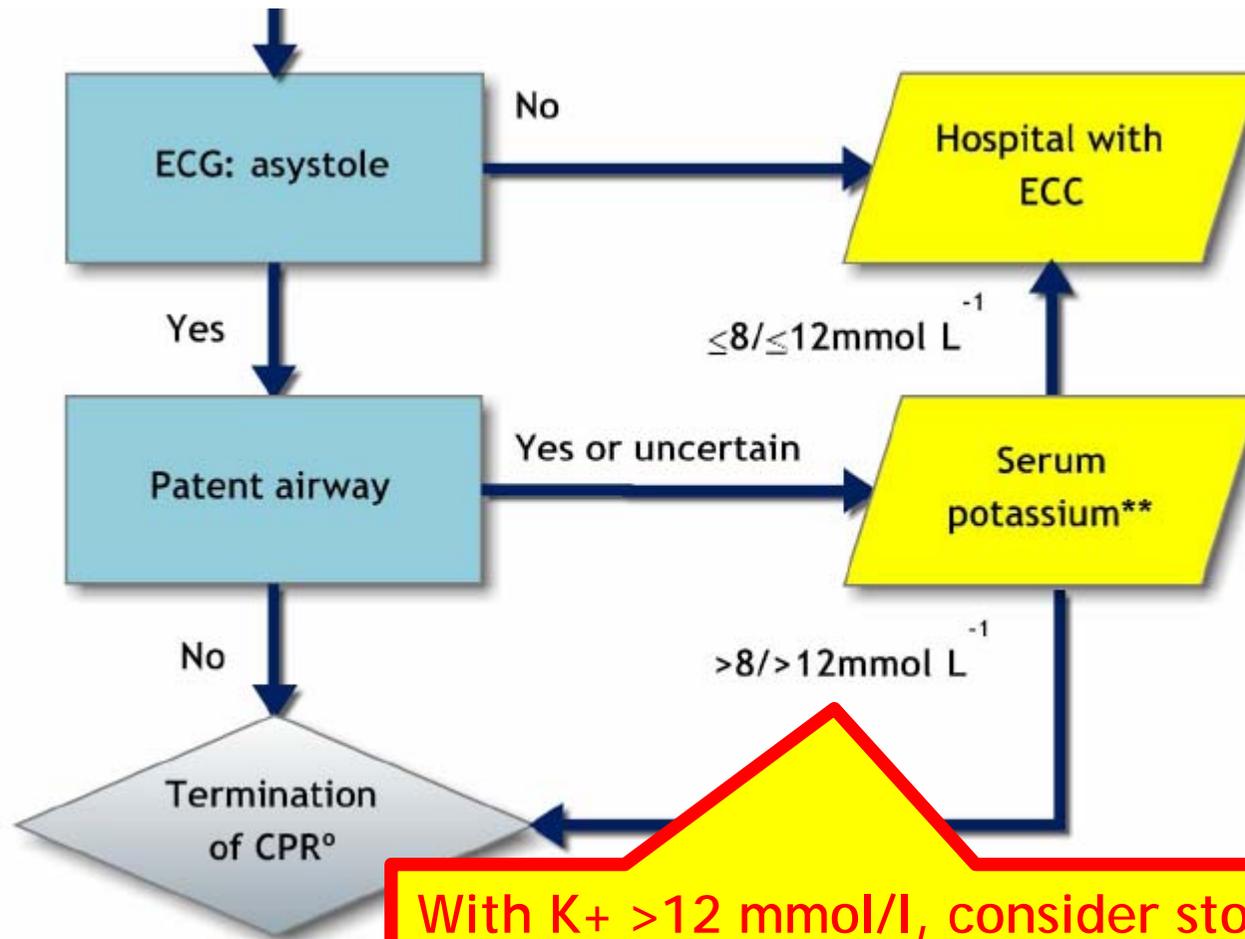
# ICAR MEDCOM recommendations 2011



# ICAR MEDCOM recommendations 2011



# ICAR MEDCOM recommendations 2011

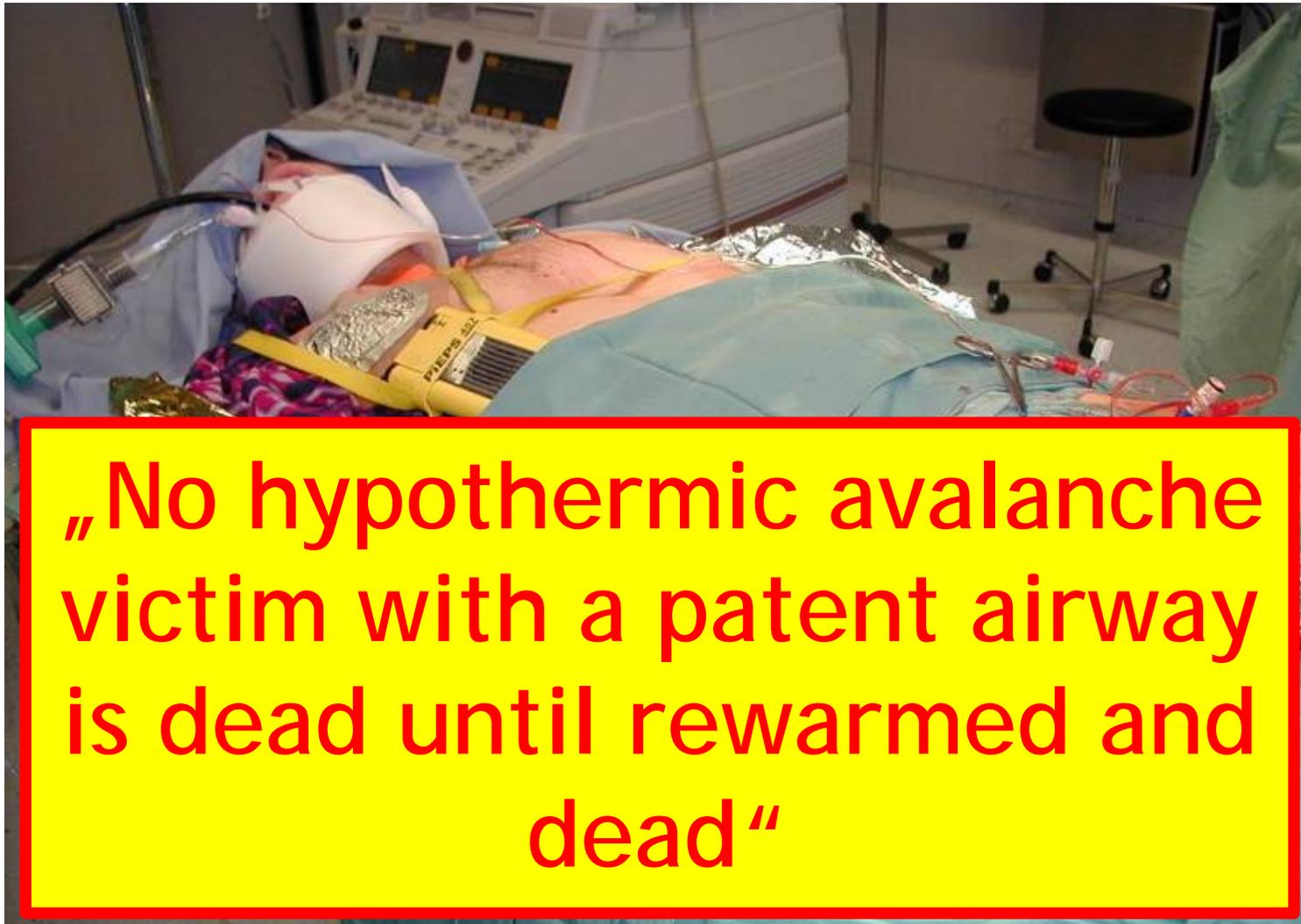


With  $K^+ > 12 \text{ mmol/L}$ , consider stopping resuscitation; in an adult with  $K^+ > 8 \text{ mmol/L}$  CPR may be

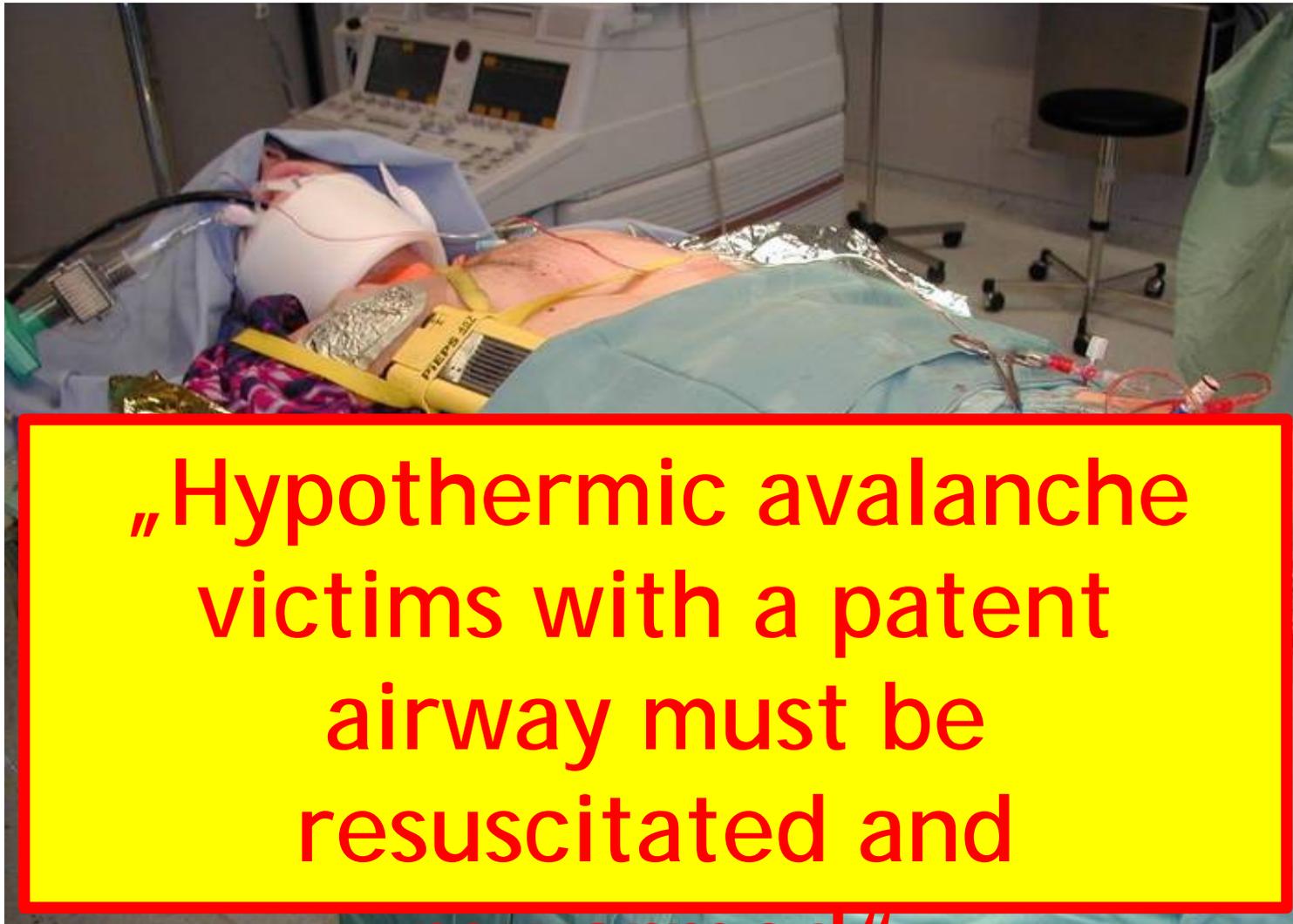
# ICAR MEDCOM recommendations 2011



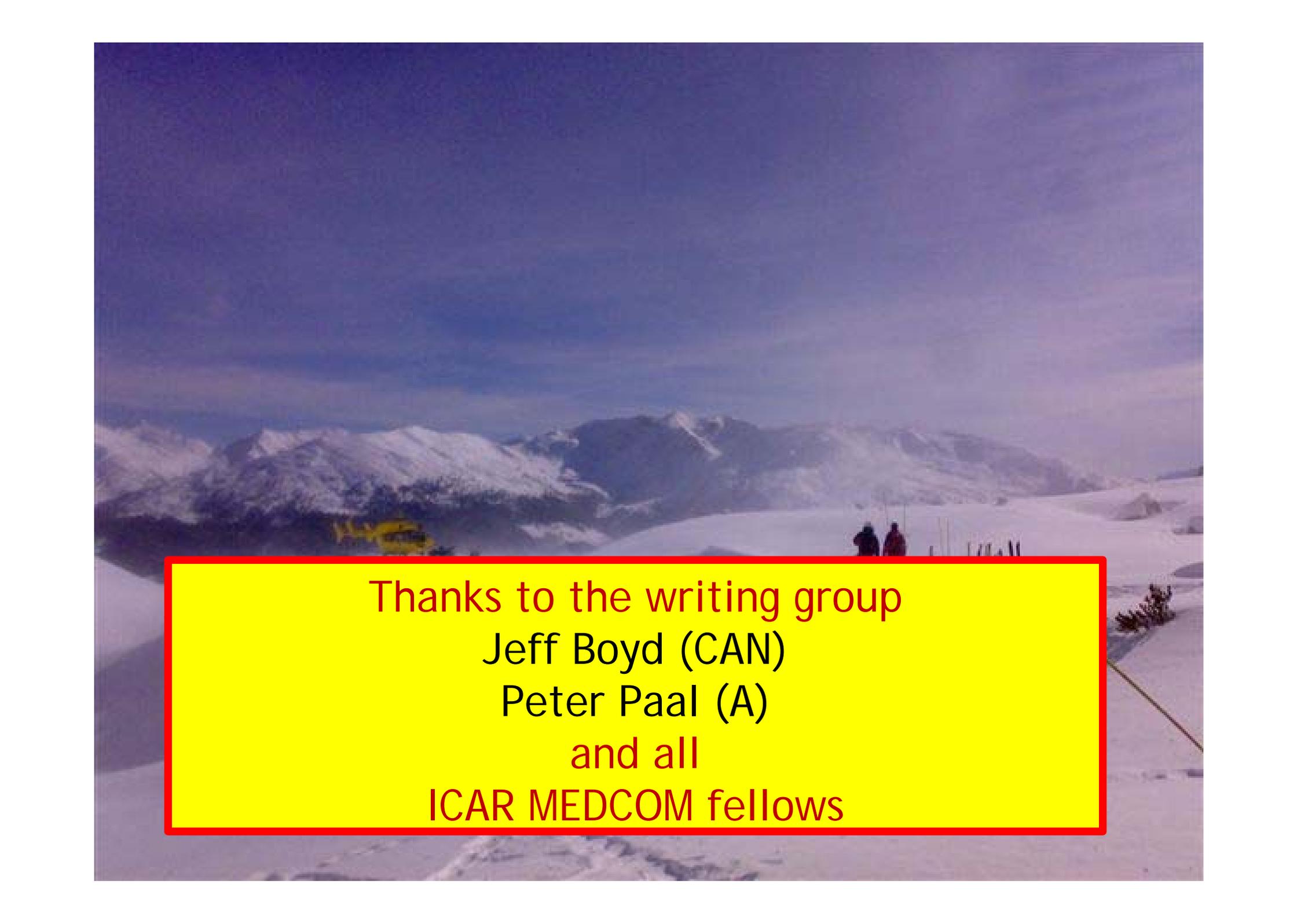
## ICAR MEDCOM recommendations 2011



## ICAR MEDCOM recommendations 2011



**„Hypothermic avalanche victims with a patent airway must be resuscitated and rewarmed“**

A photograph of a snowy mountain landscape. In the foreground, there are snow-covered dunes. In the middle ground, two people are standing on a ridge, looking out over the landscape. In the background, there are snow-capped mountains under a clear blue sky. A yellow box with a red border is overlaid on the bottom half of the image, containing text.

Thanks to the writing group  
Jeff Boyd (CAN)  
Peter Paal (A)  
and all  
ICAR MEDCOM fellows



