

# APPROACH TO THE INJURED HOCKEY PLAYER

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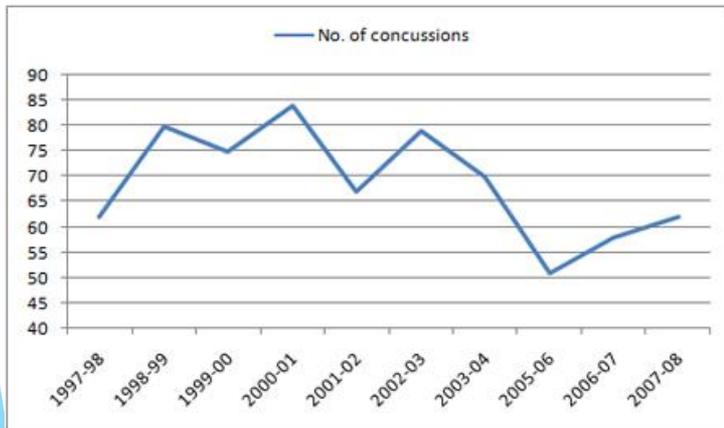
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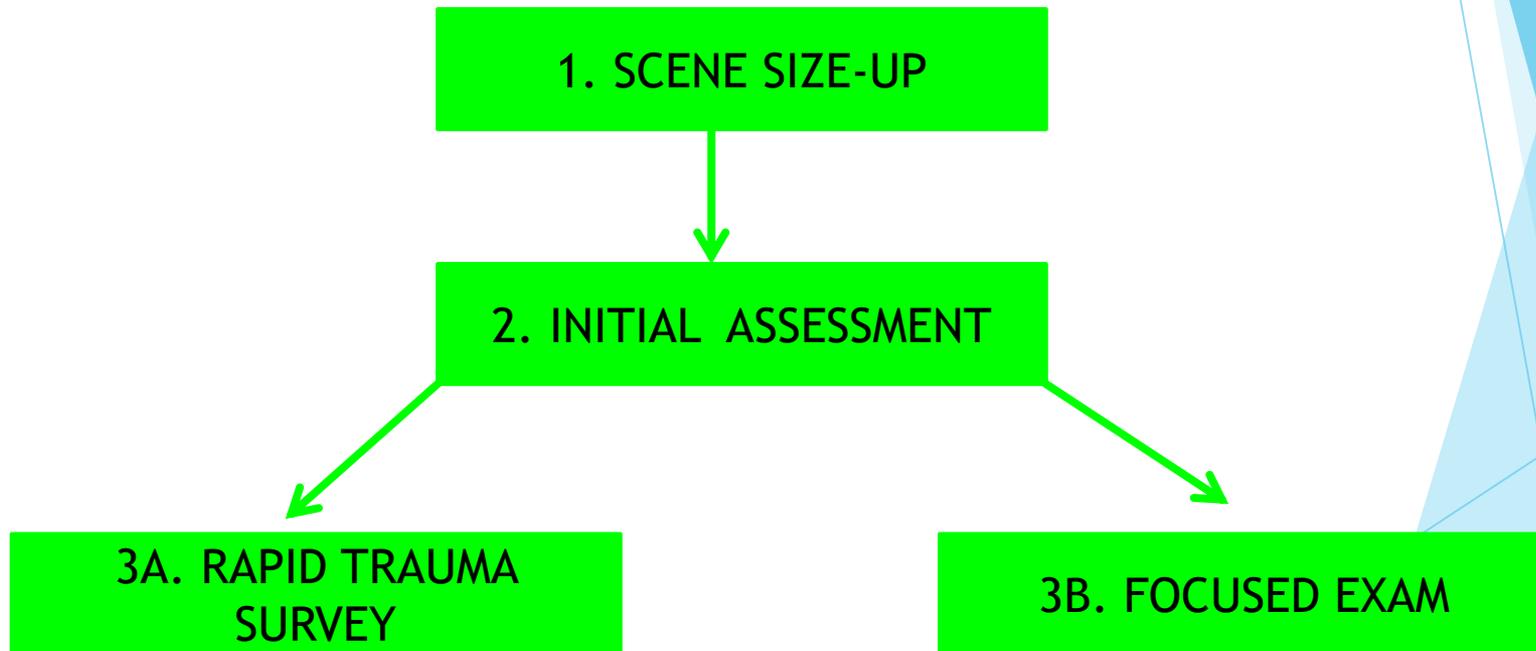
# INTRODUCTION

- Hockey injuries
  - Lower body injury - 20%
  - Upper body injury - 15%
  - Concussions - 12%
- Primary survey
  - Head injuries
  - Thoracic injuries
  - Abdominal injuries
  - Lower/upper extremity injuries
  - Spine injury



# PRIMARY SURVEY

Goal:  
IDENTIFY LIFE - THREATING INJURIES



# ARRIVAL TO THE SCENE

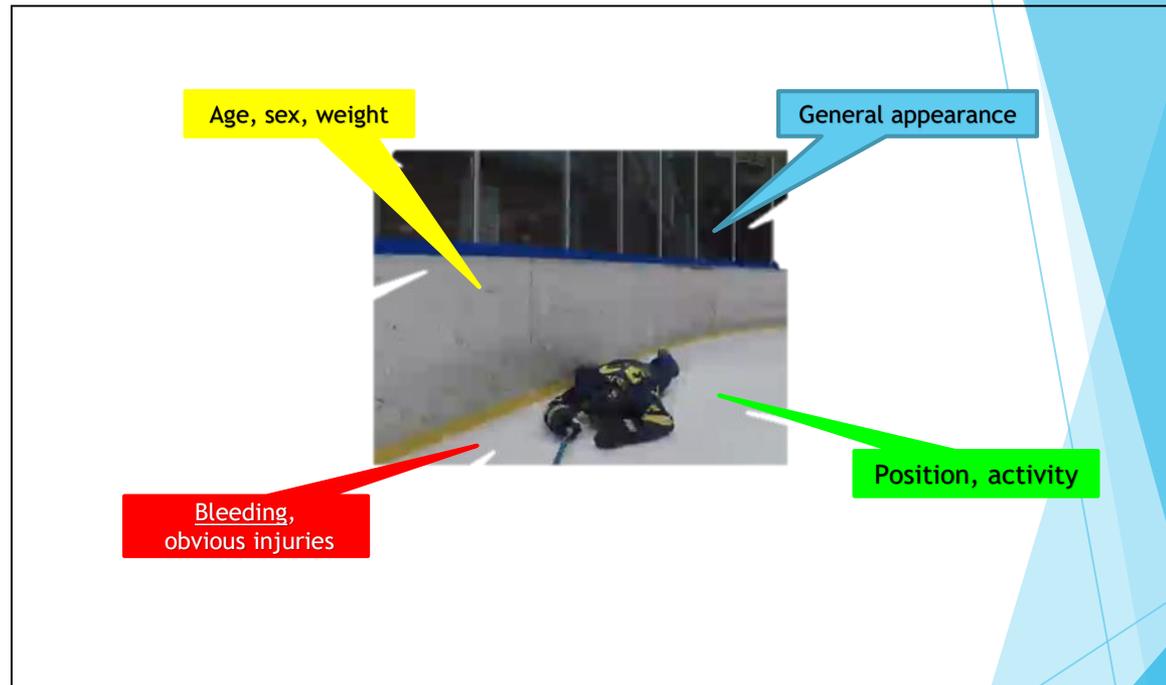
## SCENE SIZE - UP

- Standard precautions
- Hazards
- N of pts
- Need of additional help
- Mechanism of injury

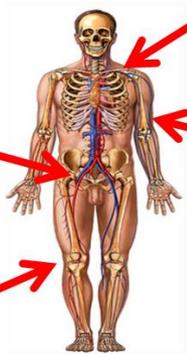


## INITIAL ASSESSMENT

- General impression
- Stop bleeding!
- LOC
- Control of CS
- ABC



# FIRST STEP: STOP THE BLEEDING



# HELMET REMOVAL



# ...OR NOT



**Figure 2.** Recommended method of immobilization of an ice hockey player with a potential cervical spine injury. The helmet is left in place, lateral foam pads secure the helmet in position, and straps secure the athlete to the backboard.

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## Cervical Spine Alignment in the Immobilized Ice Hockey Player

### A Computed Tomographic Analysis of the Effects of Helmet Removal\*

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## MANUAL STABILIZATION OF CERVICAL SPINE → LOC



**A**

Remove the mouth guard  
Positioning  
Suction  
Advanced airway

**B**

High flow oxygen  
Assisted ventilaton  
Control ventilation

**C**

Bleeding control  
Iv access / fluids  
Blood glucose

# RAPID TRAUMA SURVEY

## Inspect Head and Neck

Major Facial Injuries, Bruising, Swelling,  
Penetrations, Subcutaneous Emphysema  
Neck Vein Distention? Tracheal Deviation?



Without Visor



With Visor



## Inspect Chest

Asymmetry, Contusion, Penetrations,  
Paradoxical Motion, Instability,  
Crepitation

## Breath Sounds

Present? Equal?  
(If unequal: Percussion)

## Heart Tones





# LIFE THREATENING THORACIC INJURIES

AIRWAY OBSTRUCTION

FLAIL CHEST

OPEN PNEUMOTHORAX

HEMATOTHORAX - MASSIVE

TENSION PNEUMOTHORAX

CARDIAC TAMPONADE

## Abdomen

Bruising, Penetration/Evisceration,  
Tenderness, Rigidity, Distention

## Pelvis

Tenderness, Instability, Crepitation



# Lower/Upper Extremities

Swelling, Deformity, Instability, Motor,  
Sensory

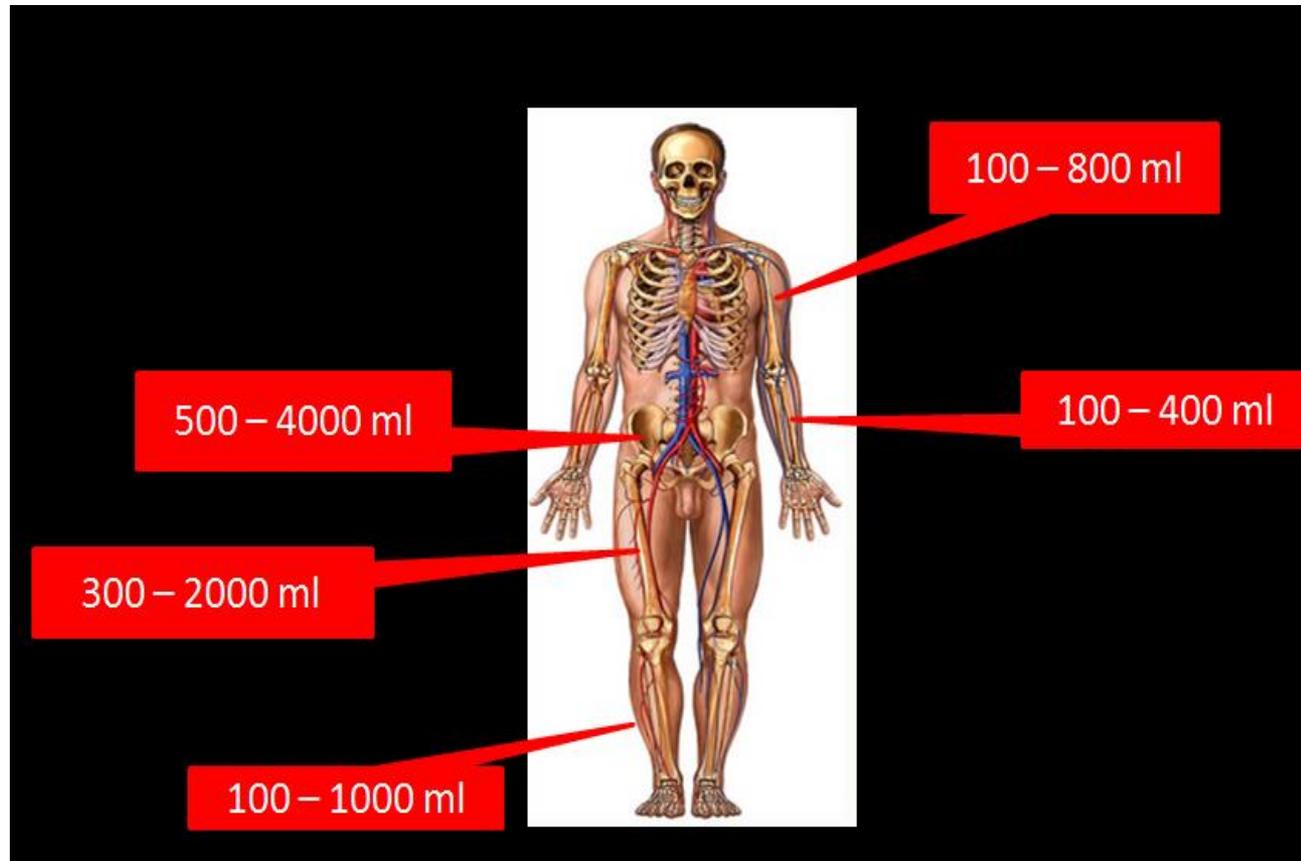
Place Patient on Backboard

## Posterior

Penetrations, Deformity, Presacral Edema



# BONE FRACTURES: LOSS OF BLOOD



## BASIC NEUROLOGICAL EXAM

- ▶ PUPILS: size, reactive, equal
- ▶ GCS: eye, voice, motor
- ▶ Blood glucose

# BRIEF TARGET HISTORY

WHEN?

- S** Symptoms
- A** Allergies
- M** Medications
- P** Past medical history
- L** Last oral intake
- E** Events preceding incident

# FULL BODY SPLINTING



# LOAD AND GO SITUATION

## Initial Assessment

- Altered mental status
- Abnormal respiration
- Abnormal circulation

## Shock potential

- Abnormal chest exam
- Tender, distended abdomen
- Pelvic instability
- Bilateral femur fractures

# CONCLUSSION

- High proportion of injuries in hockey appear to result from intentional body contact
- The helmet should fit snugly
- Coaches, athletes, and parents must be aware of the possible injuries and follow the rules in place to prevent them
- Have fun. Play hard. Play smart. Play FAIR.