

Breathless

Evaluation & Stabilization of the asthmatic

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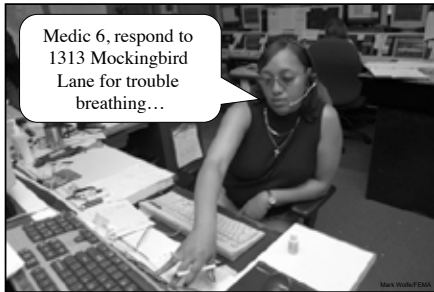
SCOPE OF PRACTICE

Those skills that providers are allowed and expected to perform as defined by their protocols and medical director.

This presentation may discuss skills and procedures that go beyond your "scope-of-practice" and in no way meant to supersede your protocols or medical director nor certify you to perform any said skills or procedures.

Dispatch

Case One



What is going through your mind?

Arrive on Scene

Case One



What are your FIRST priorities?

Initial Assessment

Case One



Assessment priorities?

Objectives

- Describe pathophysiology
- State signs & symptoms
- Describe treatment
- Describe rationale for ALS

Asthma Facts

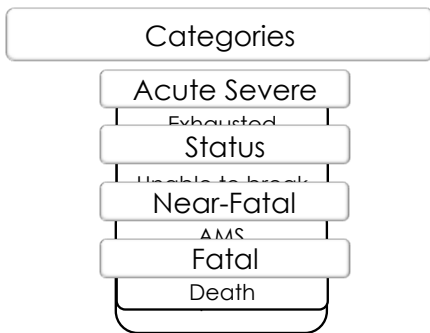
- Development of asthma
- Diagnosed patients
 - ✓ Hospitalizations
- Deaths from asthma
- Costs of asthma

Asthma Defined

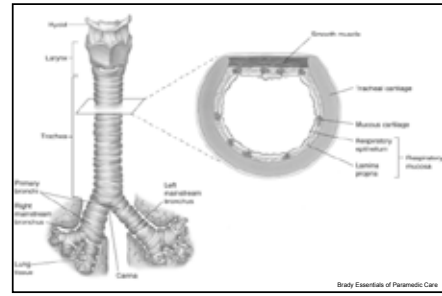
"...a chronic inflammatory disorder of the airways in which many cells & cellular elements play a role... causing recurrent episodes of wheezing, breathlessness, chest tightness & coughing...associated with widespread but variable airway obstruction often reversible..."

© 1997 National Heart, Lung, Blood Institute

Asthma Defined

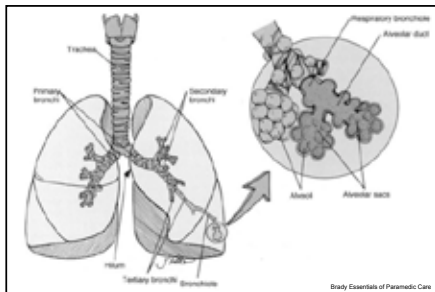


Anatomy & Physiology



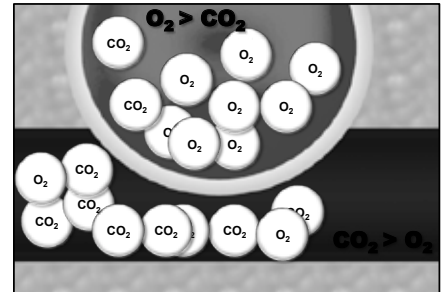
Lower Airway

Anatomy & Physiology



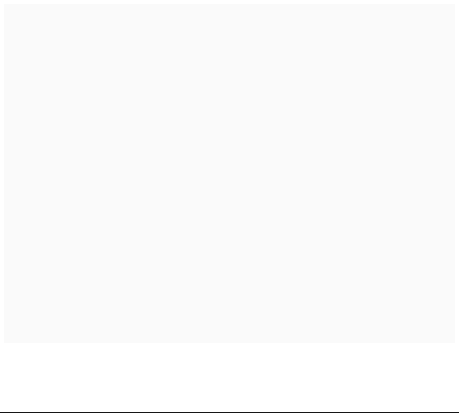
Lower Airway

Anatomy & Physiology

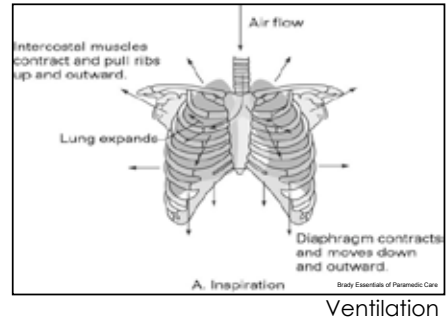


Diffusion

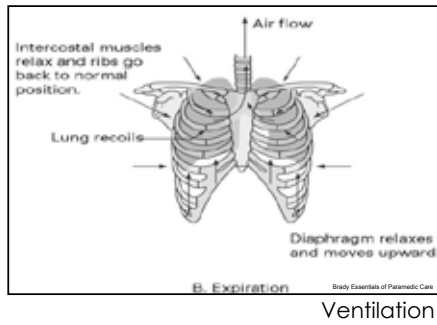
Anatomy & Physiology



Anatomy & Physiology



Anatomy & Physiology



Anatomy & Physiology



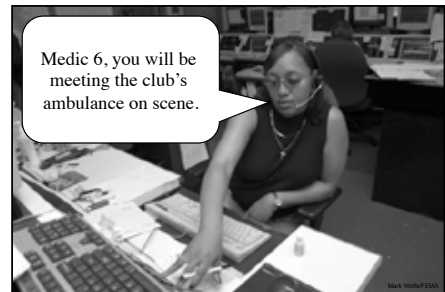
Autonomic Nervous System

Pathophysiology



Self-Defense

Dispatch



Case Two

Arrive on Scene

Case Two



Potential Causes

Initial Assessment

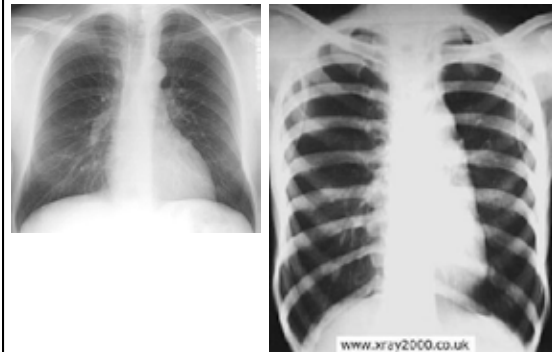
Case Two



Priorities

Pathophysiology

- Triggering
- Post-trigger exposure
- Obstruction increases
- Exhalation difficult
- Air is trapped in the alveoli
- Patient becomes tired



Causes of Asthma

90% are allergic reactions

Other forms

Aspirin-induced
Exercise-induced
Menstrual-associated
Psychological

Dispatch

Case Three



Arrive on Scene

Case Three




Initial Assessment

Case Three



General impression

Pediatric Assessment Triangle




APPEARANCE (TICLS)	Tone Interactiveness Consolability Look/Gaze Speech/Cry
BREATHING (FRAP)	Flaring Retractions Airway sounds Positioning
SKIN	Cyanosis Mottling Pallor

PEPP
Pediatric Educator for Prehospital Professionals

Quick Reference © 2002 by Kyle Bates
MPT & NREMT-9-0101

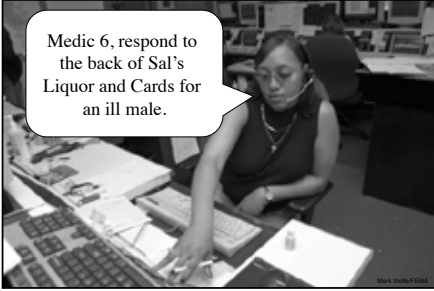
General Impression

Case Three



Dispatch


Case Four



Medic 6, respond to the back of Sal's Liquor and Cards for an ill male.

Arrive on Scene

Case Four



Initial Assessment

Case Four



Initial Assessment

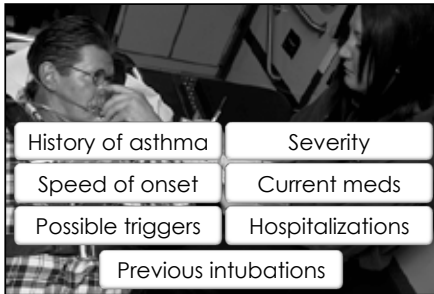
Case Four



Assessment & Treatment

Focused History

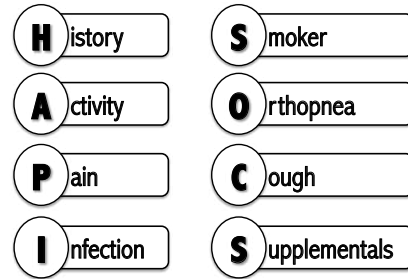
Case Four



History of asthma	Severity
Speed of onset	Current meds
Possible triggers	Hospitalizations
Previous intubations	

OPQRST / ASPN / SAMPLE

History Gathering



Mortality Risk Factors

- Severe exacerbations
- Prior intubation
- Prior hospitalizations
- Medication history
- Misperceives severity
- Pre-existing conditions
- Illicit drug use

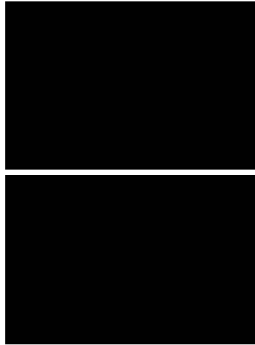
Physical Exam

Case Four



Vital Signs

End-Tidal CO₂



Capnography.com

Physical Exam



HEENT

Physical Exam



Chest

Physical Exam



Abdomen

Physical Exam

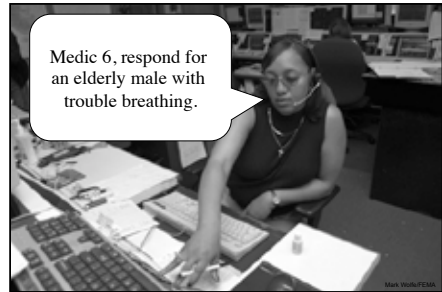


- Pedal edema
- Paradoxical pulse
- Cyanosis

Extremities

Dispatch

Case Five



Medic 6, respond for an elderly male with trouble breathing.

Differentials

- Cardiac
- COPD
- Pulmonary infection
- Upper airway obstruction
- Lower airway FOB
- Endobronchial disease
- Pulmonary embolus
- Allergic reaction
- Anaphylaxis

Arrive on Scene Case Five

Differential Diagnoses

Dispatch Case Six

Medic 6, respond to 222 Smith Street for a severe asthma attack.

Arrive on Scene Case Six

Priorities

Initial Assessment Case Six

Focused History Case Six

Sick x2 days
ICU 6 mos ago
3 MDIs this month

Physical Exam

Case Six



Vital Signs & Focused Exam

Management

Case Six



BLS Management



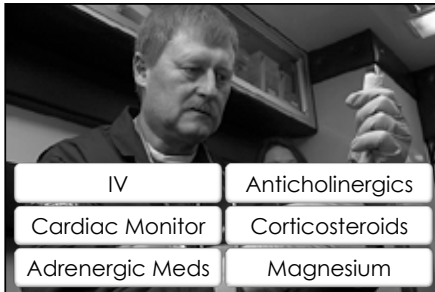
Albuterol Sulfate

Management

Post-Administration

- Reassess LOC
- Reassess A, B, Cs
- Reassess vital signs
- Reassess lung sounds
- Re-inspect chest
- Repeat if Sx persist

ALS Management

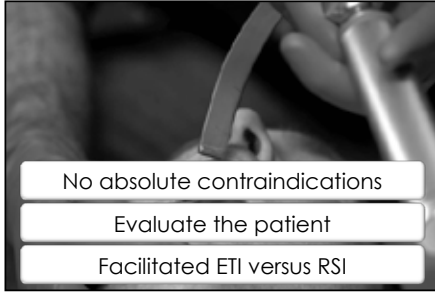


ALS Management



NiPPV

ALS Management



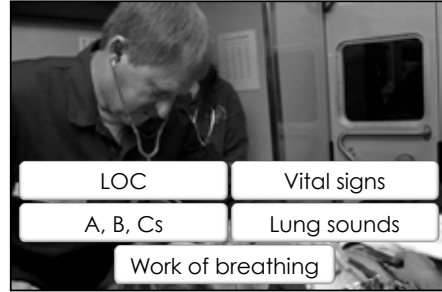
No absolute contraindications

Evaluate the patient

Facilitated ETI versus RSI

Intubation

Reassessment



LOC

Vital signs

A, B, Cs

Lung sounds

Work of breathing



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Thank You!