



**Pulse Check 2018
EMT Core Content**



Topics & Credit Hours

- Pharmacology
 - Cardiology
 - Respiratory
 - Toxicology
 - Renal
 - Abdominal
 - Psychiatric
 - Shock/Resuscitation
 - Childbirth
- 1 hour
 - 1 hour
 - 1 hour
 - 0.5 hour
 - 1 hour
 - 1 hour
 - 1 hour
 - 1 hour
 - 1 hour



Size Up

Chief Complaint

Airway

Breathing

Circulation

Defib

Decision

Disability

Expose

Examine

Environment

Focused HX

GO – Ongoing Assessment



SCENE SIZE UP

Scene Safety

Standard Precautions

MOI/NOI

of patients

Need for Spinal Motion Restriction

Additional Resources

General Impression



GENERAL IMPRESSION

A APPEARANCE

B WORK OF BREATHING

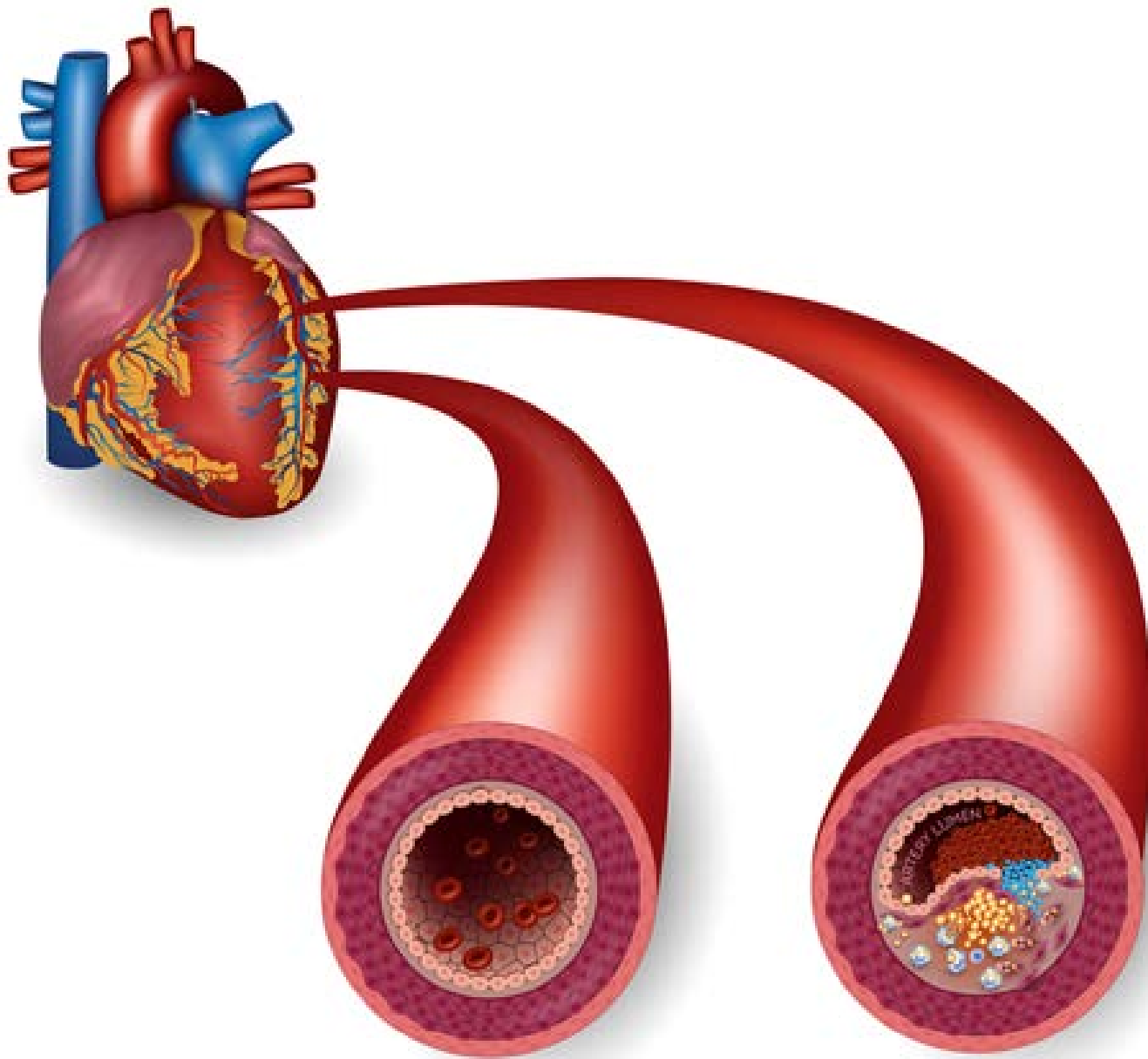
C COLOR

62 year old
complaining of
chest pain x 2
hours.



- Size Up
- Airway
- Breathing
- Circulation
- Decision
- Defib
- Disability
- Diagnostics
- Expose
- Examine
- Environment
- Focused History
- Go/Ongoing Assessment



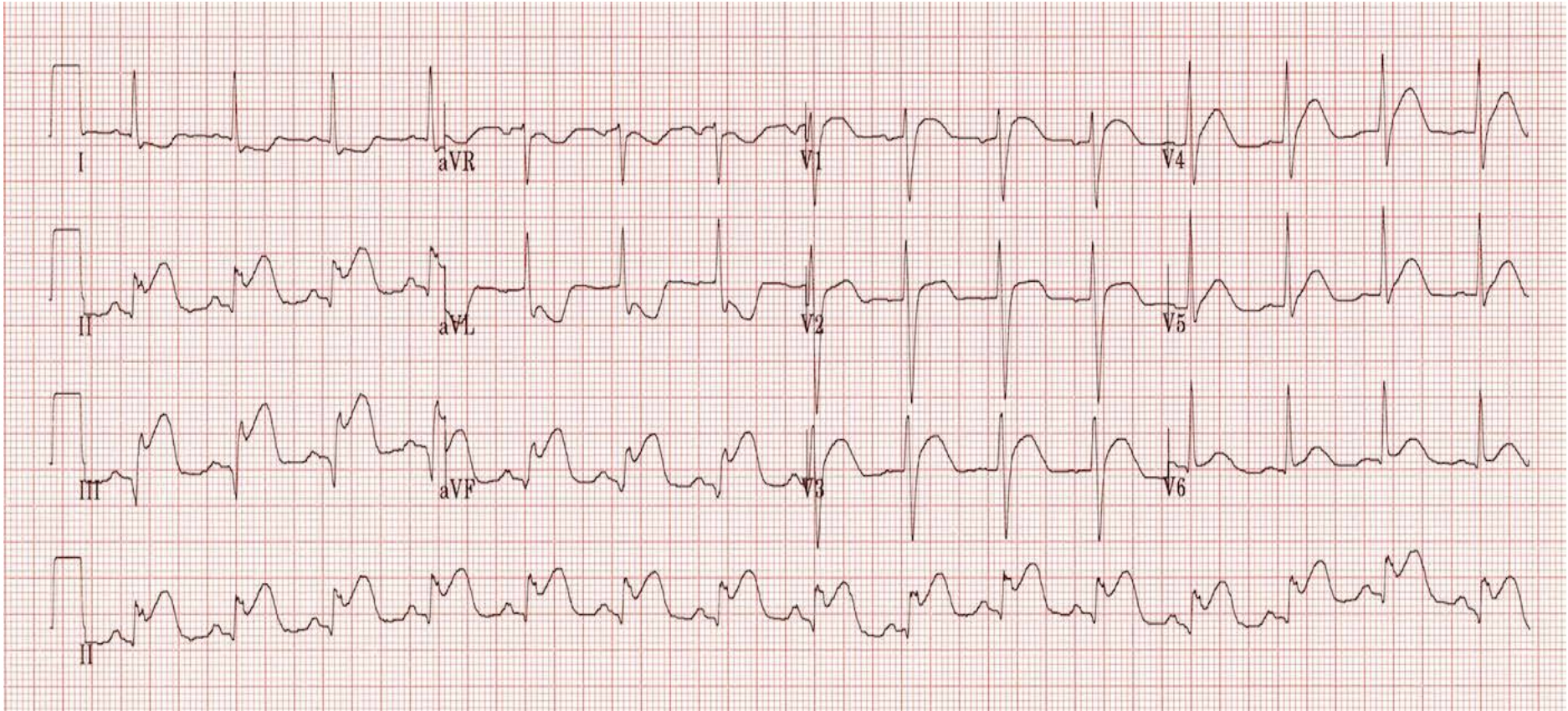


NORMAL ARTERY

ATHEROSCLEROSIS
AND BLOOD CLOT









70 Year Old
complaining
of difficulty
breathing
and chest
pain.

- Size Up
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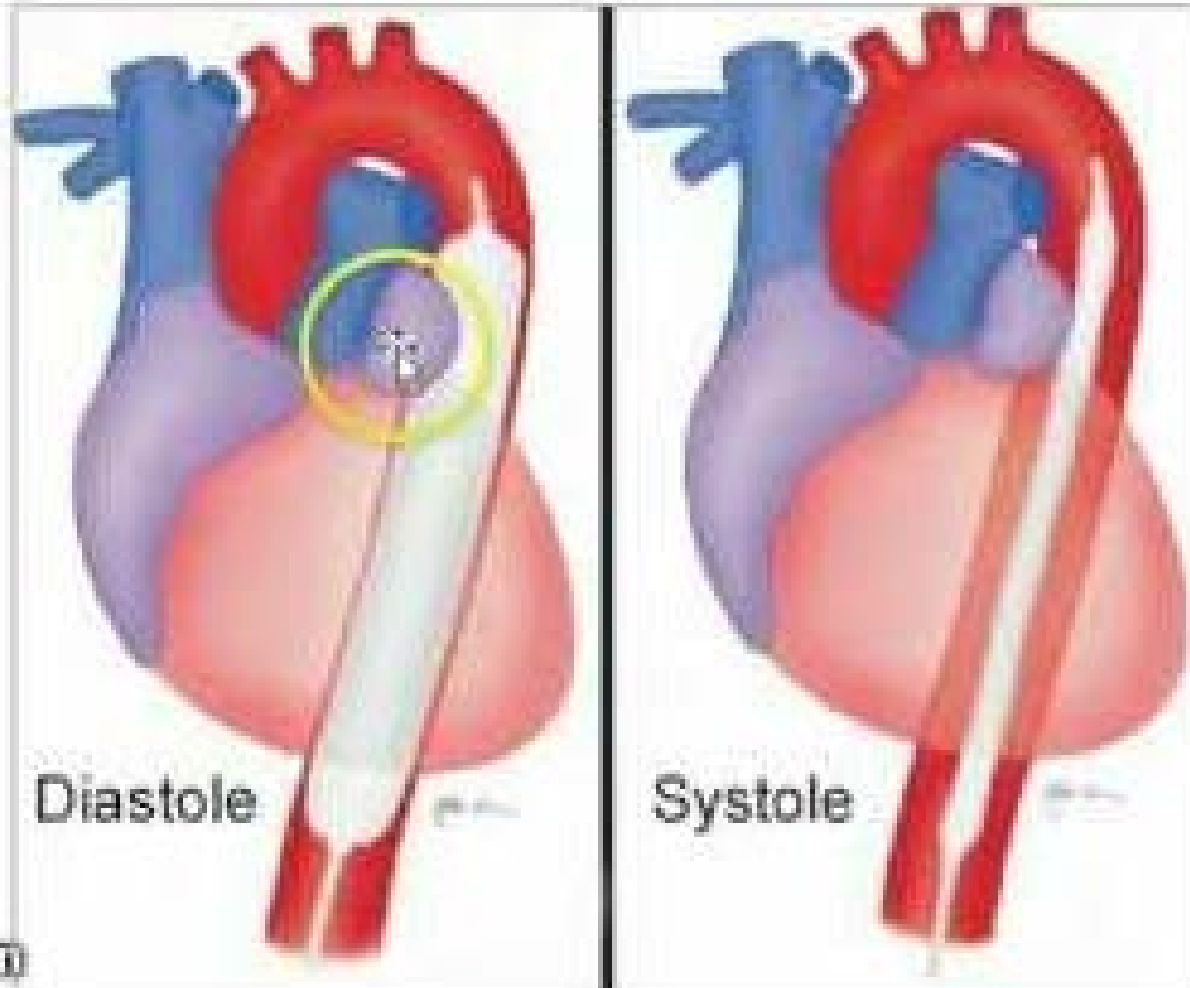




PUMP FAILURE?



Intra-aortic balloon counterpulsation (IABP)



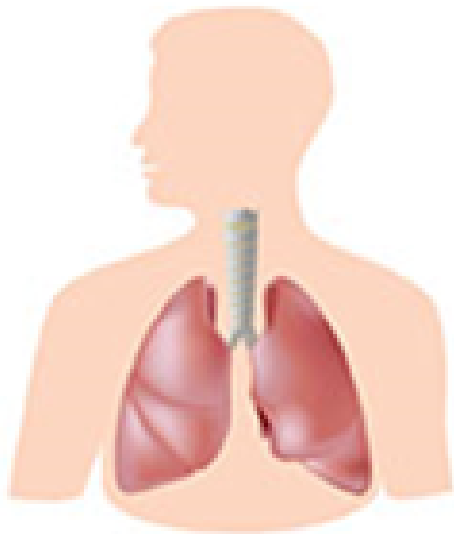


28 year old
difficulty
breathing

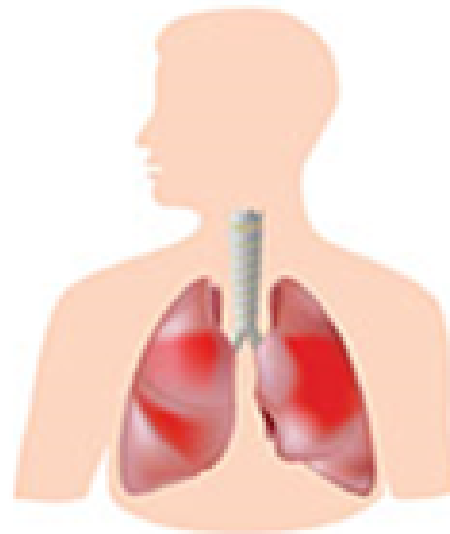
- Size Up
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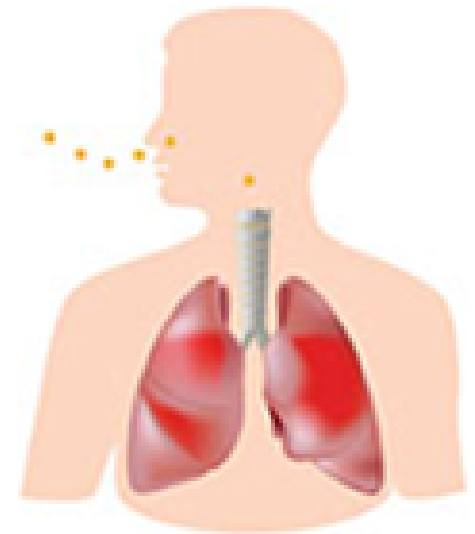
Asthma



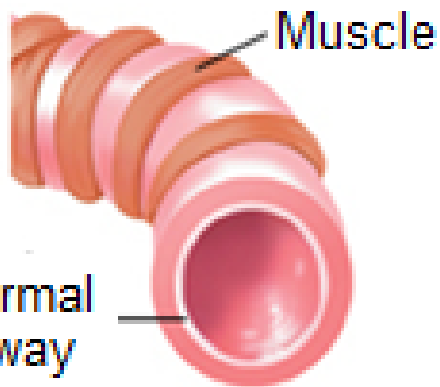
Normal airway



Asthma

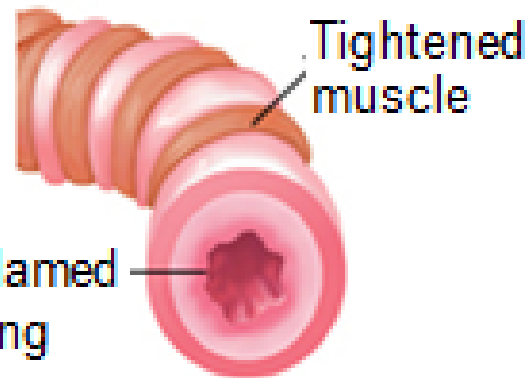


Sever Asthma



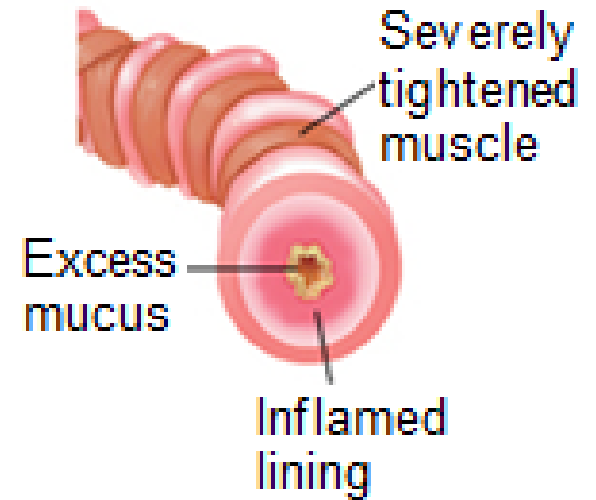
Normal
airway
lining

Muscle



Tightened
muscle

Inflamed
lining



Severely
tightened
muscle

Excess
mucus

Inflamed
lining



200 Metered Inhalations

NDC 0173-0862-20

Ventolin[®] HFA
(albuterol sulfate)
Inhalation Aerosol
90 mcg per actuation

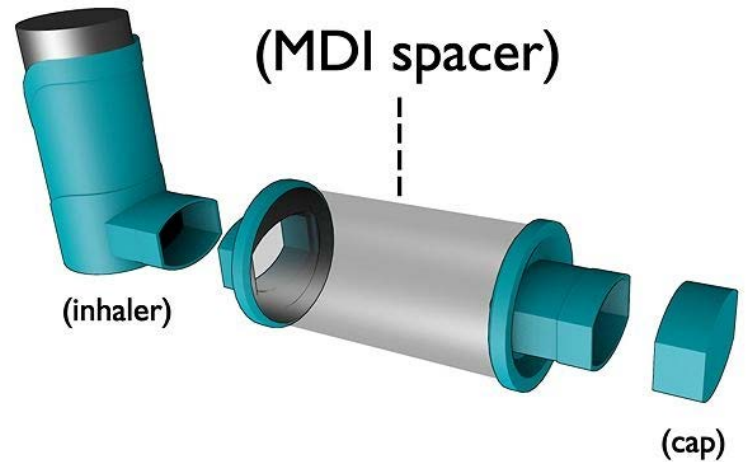
FOR ORAL INHALATION ONLY
For use with Ventolin[®] HFA actuator only.

Contains: Each canister contains a microcrystalline suspension of albuterol sulfate in propellant HFA 134a (1,1,1,2-tetrafluoroethane). Each actuation delivers 100 mcg of albuterol sulfate equivalent to 90 mcg albuterol base from the mouthpiece.

Attention Pharmacists: Detach the Patient Information leaflet from package insert and dispense with inhaler.

Rx only **With Counter**

Net Wt. 18 g





NDC 0487-9501-25

**Albuterol Sulfate
Inhalation Solution, 0.083%***

2.5 mg* / 3 mL

*Potency expressed as albuterol, equivalent to 3 mg albuterol sulfate.

FOR ORAL INHALATION ONLY

Equivalent to 0.5 mL Albuterol Sulfate 0.5%* diluted to 3 mL with normal saline.
Attention Pharmacist: Detach "Patient's Instructions For Use" from package insert and dispense with solution.
Protect from light. Store between 2° and 25°C (36° and 77° F).
 Discard if solution becomes discolored.
 (Note: Albuterol Sulfate Inhalation Solution is a clear, colorless to light

Rx only

25 x 3 mL Sterile Unit-Dose Vials

**Albuterol Sulfate
Inhalation Solution
0.083%***

2.5 mg* / 3 mL

*Potency expressed as albuterol, equivalent to 3 mg albuterol sulfate.

FOR ORAL INHALATION ONLY

Equivalent to 0.5 mL albuterol sulfate 0.5%* diluted to 3 mL with normal saline.
 Each mL contains 1 mg albuterol sulfate, equivalent to 0.03 mg albuterol, in an aqueous solution containing sodium chloride and sulfuric acid to adjust pH between 3 and 5. Contains no preservatives.

Please consult your physician before use. Do not exceed recommended dosage.

Usual Dosage: See package insert.

Protect from light. Store between 2° and 25°C (36° and 77° F).

Discard if solution becomes discolored.
 (Note: Albuterol Sulfate Inhalation Solution is a clear, colorless to light yellow solution.)

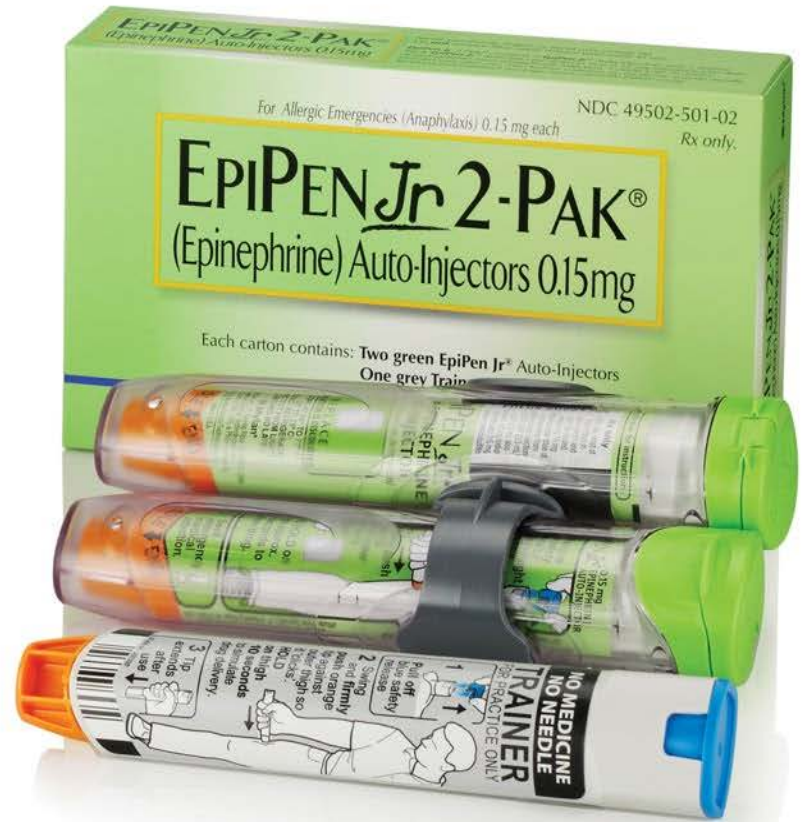
Attention Pharmacist: Detach "Patient's Instructions For Use" from package insert and dispense with solution.

SEE BACK OF POUCH FOR INSTRUCTIONS FOR USE.

Rx Only

STERILE

25 x 3 mL Unit-Dose Vials

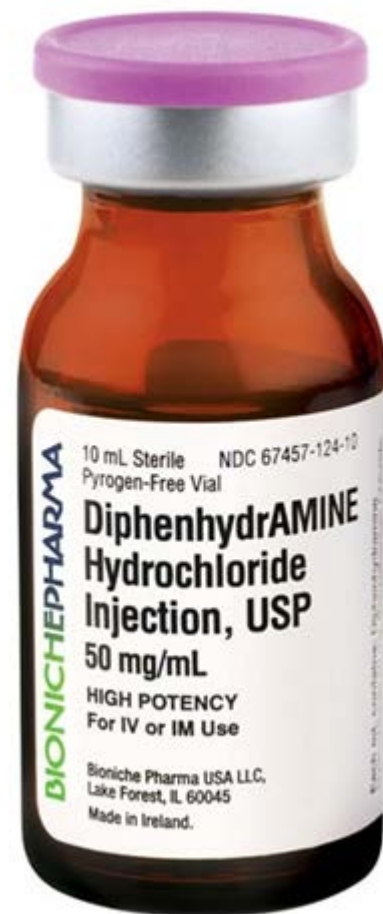


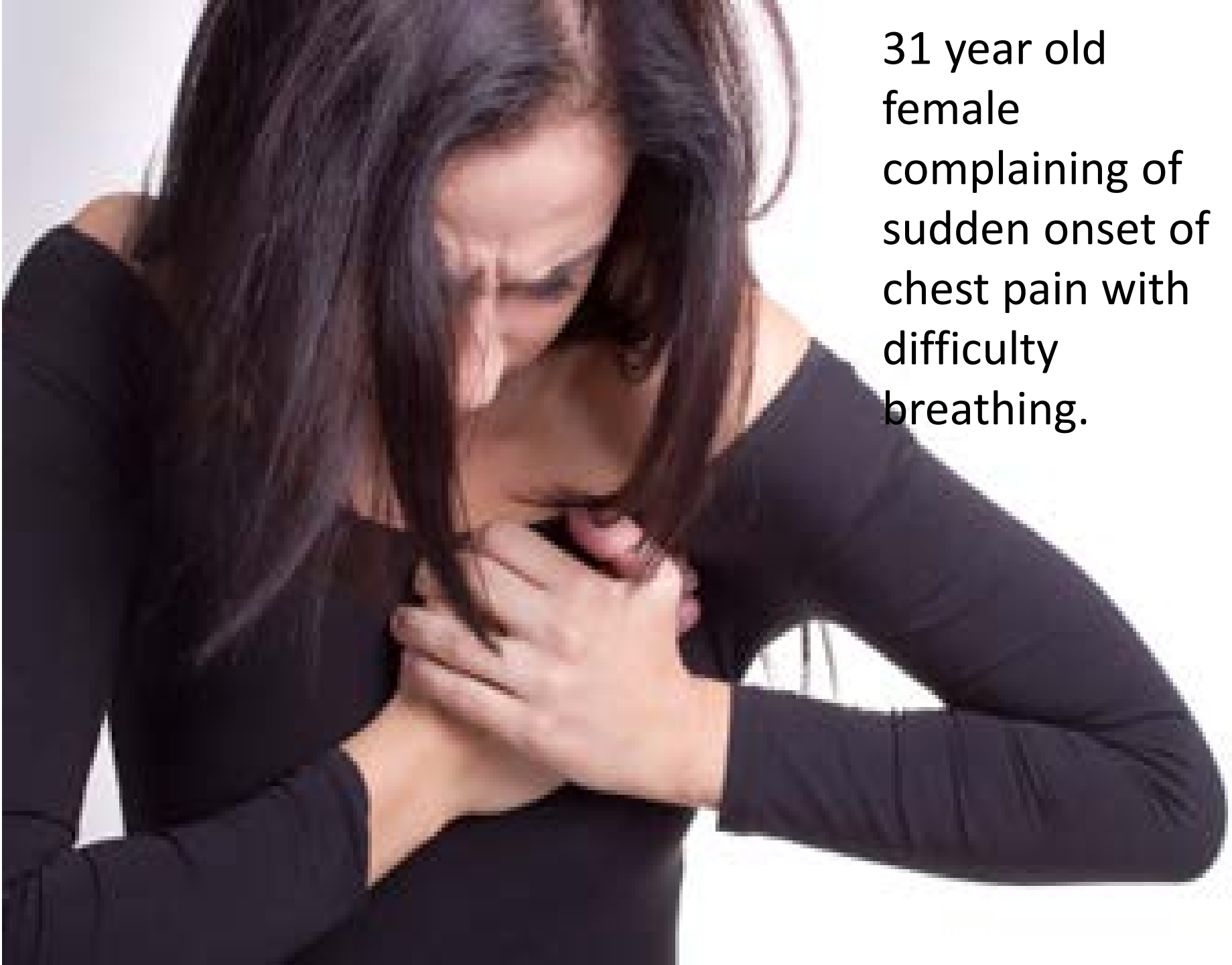


30 year old
female
complaining of
rapid onset
difficulty
breathing
driving home
from lunch.

- Size Up
- Airway
- Breathing
- Circulation
- Decision
- Defib
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- Focused History
- Go/Ongoing Assessment





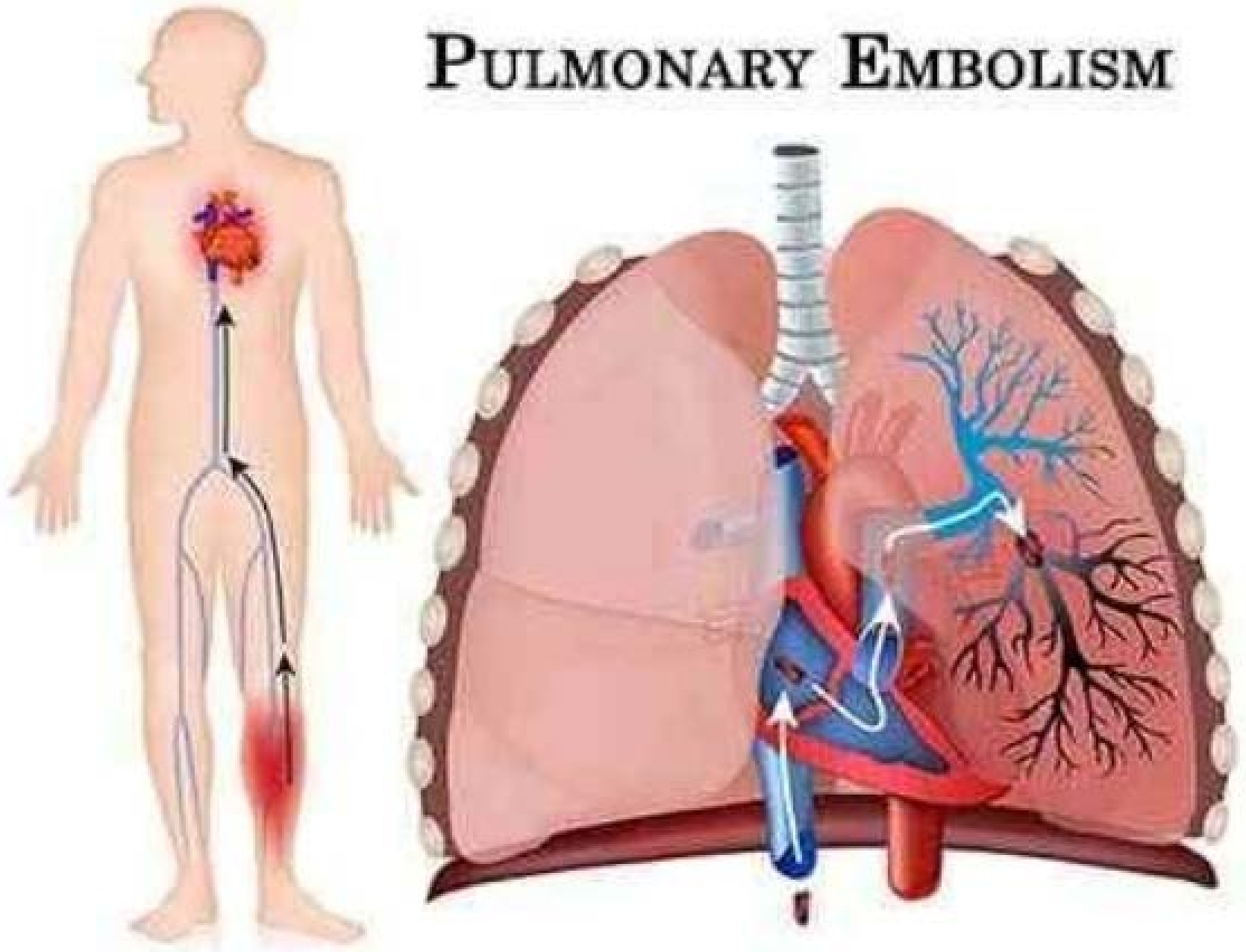


31 year old
female
complaining of
sudden onset of
chest pain with
difficulty
breathing.

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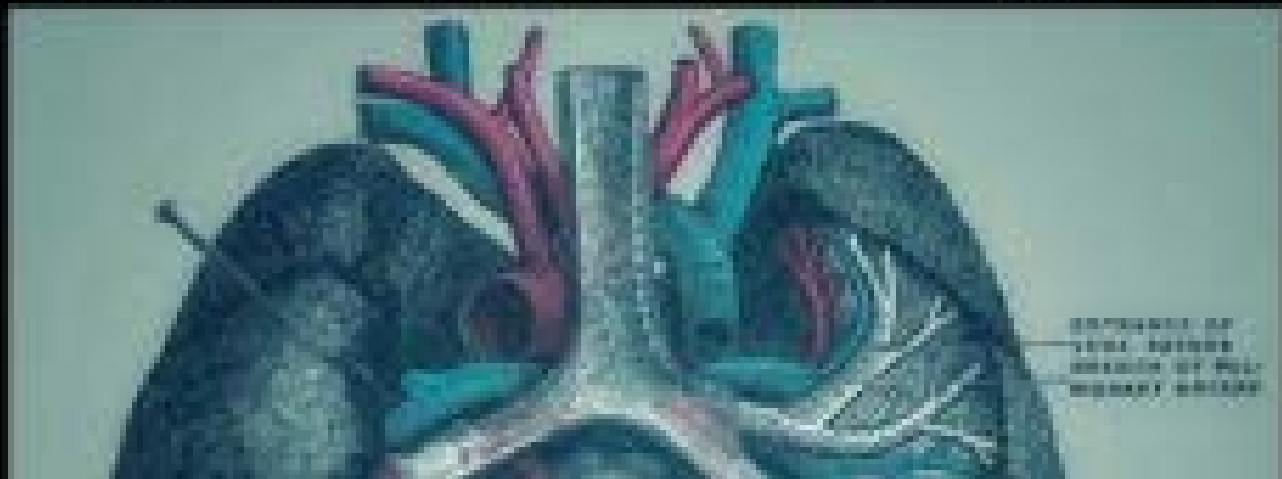
PULMONARY EMBOLISM



Siti Nurul Afiqah binti Johari (10-6-95)



V/Q MISMATCH



Anyone can get pulmonary embolism. The risk factors are:

- prolonged bed rest or inactivity
- oral contraceptives (birth control pills)
- surgery
- pregnancy – before, during and after delivery
- cancer
- Stroke or heart attack
- heart surgery
- fractures of the hips or femur
- previous deep vein thrombosis

54 year old male
altered mental status.



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Cincinnati Prehospital Stroke Scale



Facial Droop

Instruction: Ask patient to smile

- Normal:* Both sides of face move equally
- Abnormal:* One side of face does not move as well



Arm Drift

Instruction: Ask patient to close eyes and extend both arms straight out for 10 seconds

- Normal:* Both arms move the same or not at all
- Abnormal:* One arm does not move or drifts down



Speech

Instruction: Ask patient to say "You can't teach an old dog new tricks."

- Normal:* Patient says correct words without slurring
- Abnormal:* Patient slurs words, says wrong words, or is unable to speak



Smoke
inhalation
from house
fire

- Size Up
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Aldehydes, acid gases, sulfur dioxide, nitrogen oxides, polycyclic aromatic hydrocarbons (PAHs), benzene, toluene, styrene, metals and dioxins.

BAD STUFF! Soot. Carbon Monoxide. Cyanide.

QUEENSLAND AMBULANCE SERVICE

Do You Have One of These?

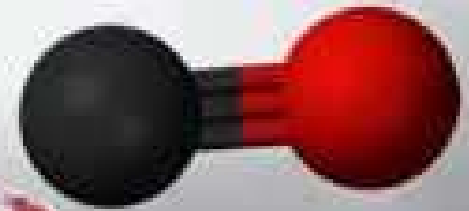




HCN



CO



THE TOXIC TWINS









APPLY EARLY
FOR RECRUITING



- Size Up
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22 year old possible
overdose



- Size Up
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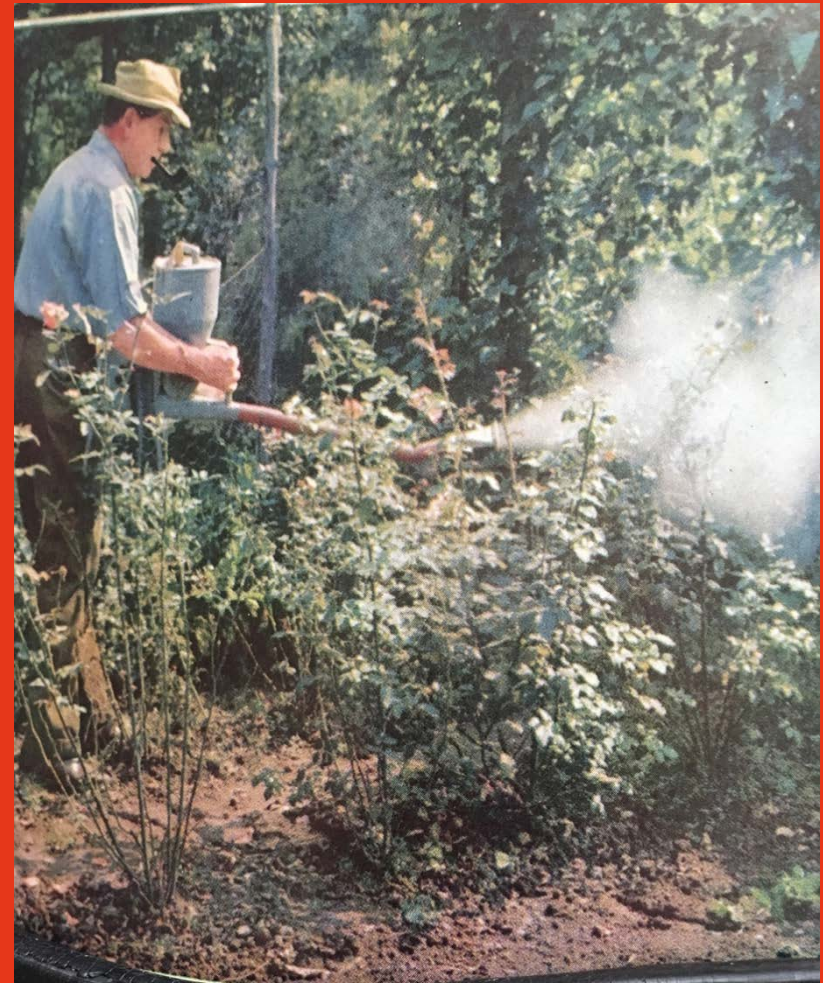
- Size Up
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Unconscious
in back yard
after
spraying
roses

- Size Up
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SLUDGEM

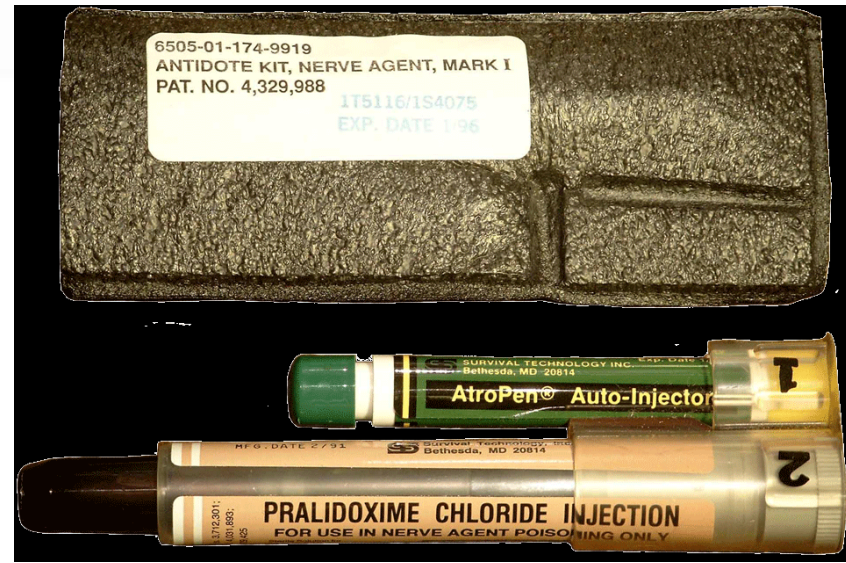
- Salivation
- Lacrimation
- Urination
- Defecation
- Gastrointestinal upset
- Emesis
- Miosis

DUMBBELS

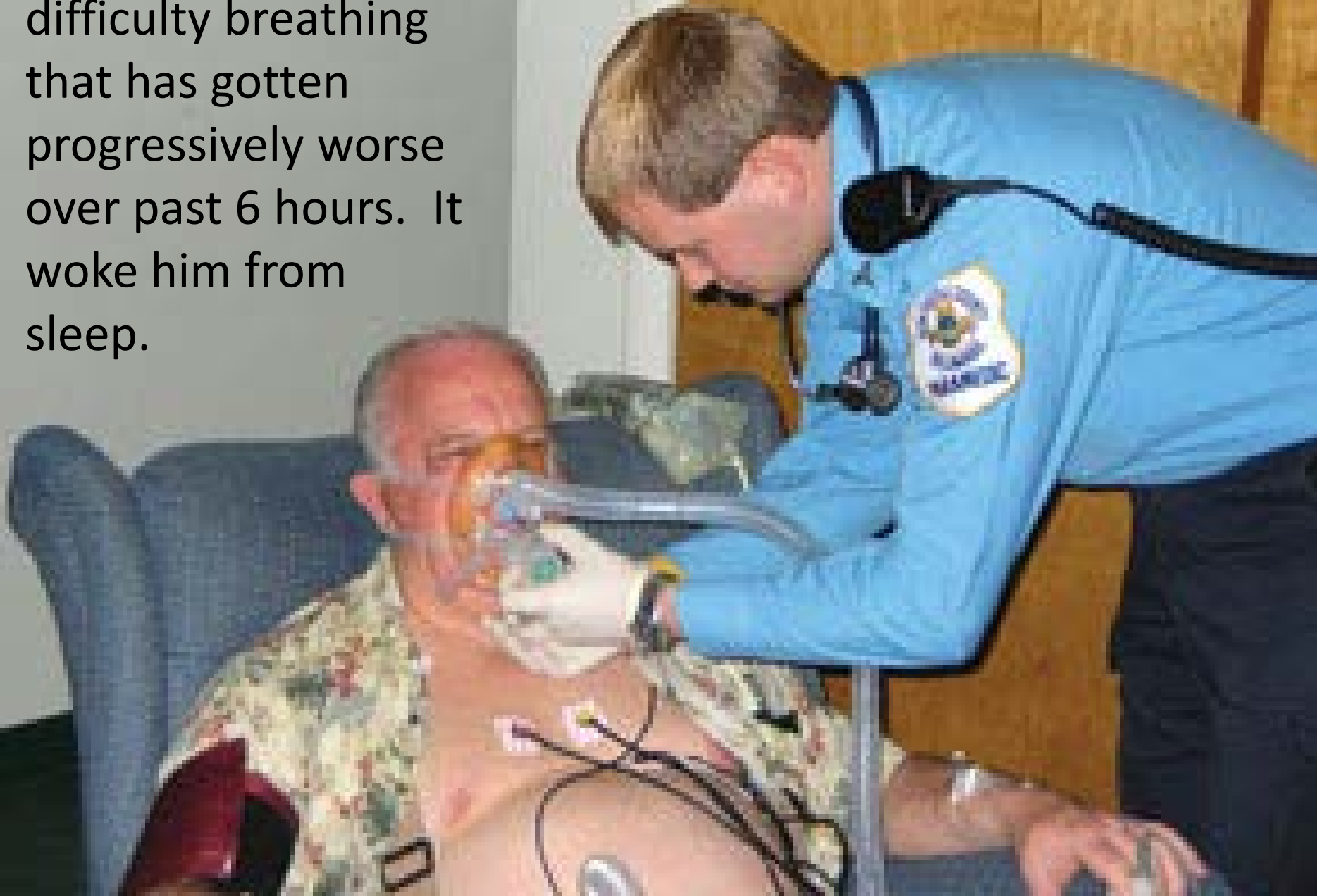
- Diarrhea
- Urination
- Miosis/muscle weakness
- Bronchorrhea
- Bradycardia
- Emesis
- Lacrimation
- Salivation/sweating

- Miosis: excessive constriction of the pupil.
- Mydriasis: dilation of the pupil.
- Anisocoria: one pupil being more dilated than the other.





65 year old C/O
difficulty breathing
that has gotten
progressively worse
over past 6 hours. It
woke him from
sleep.



- Size Up
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22 year old C/O pain and swelling in his legs and has been nauseous and vomited twice.



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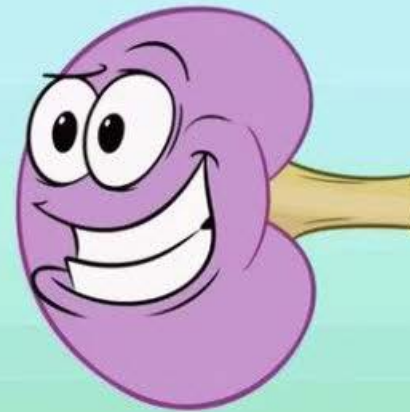
RHABDOMYOLYSIS

MUSCLE TISSUE BREAKDOWN WITH
RELEASE OF INTRACELLULAR CONTENTS
(MYOGLOBIN) INTO CIRCULATION



MUSCLE PAIN
AND WEAKNESS
DUE TO TRAUMA

ELEVATED CREATINE
KINASE (CK) LEVELS



DARK, REDDISH
BROWN URINE DUE
TO MYOGLOBINURIA

MYOGLOBIN MAY OCCLUDE THE STRUCTURES OF THE KIDNEY
AND BREAK DOWN INTO TOXIC COMPOUNDS LEADING TO
ACUTE TUBULAR NECROSIS OR ACUTE RENAL FAILURE