Academy
IDD SUPPORTER EDUCATION

The Fatal Five Plus

Presented by:

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President, IntellectAbility

This Academy training is brought to you by IntellectAbility.

Craig Escudé, MD, FAAFP, FAADM

- Board-Certified Fellow of the American Academy of Family Physicians and the American Academy of Developmental Medicine
- Over 20 years of experience caring for people with mental illness and intellectual and developmental disabilities
- Medical Director of Hudspeth Regional Center in Whitfield, MS – Retired 2018
- Founder of DETECT
- President of IntellectAbility
- Author of *Clinical Pearls in IDD Healthcare* and the *Curriculum in IDD Healthcare*

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Fatal Five Plus

- Aspiration
- Bowel Obstruction
- Seizures
- Dehydration
- Sepsis
- + GERD

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Question:

Approximately what percentage of people with IDD do you think experience swallowing problems?

- 10%
- 25%
- 50%
- 65%

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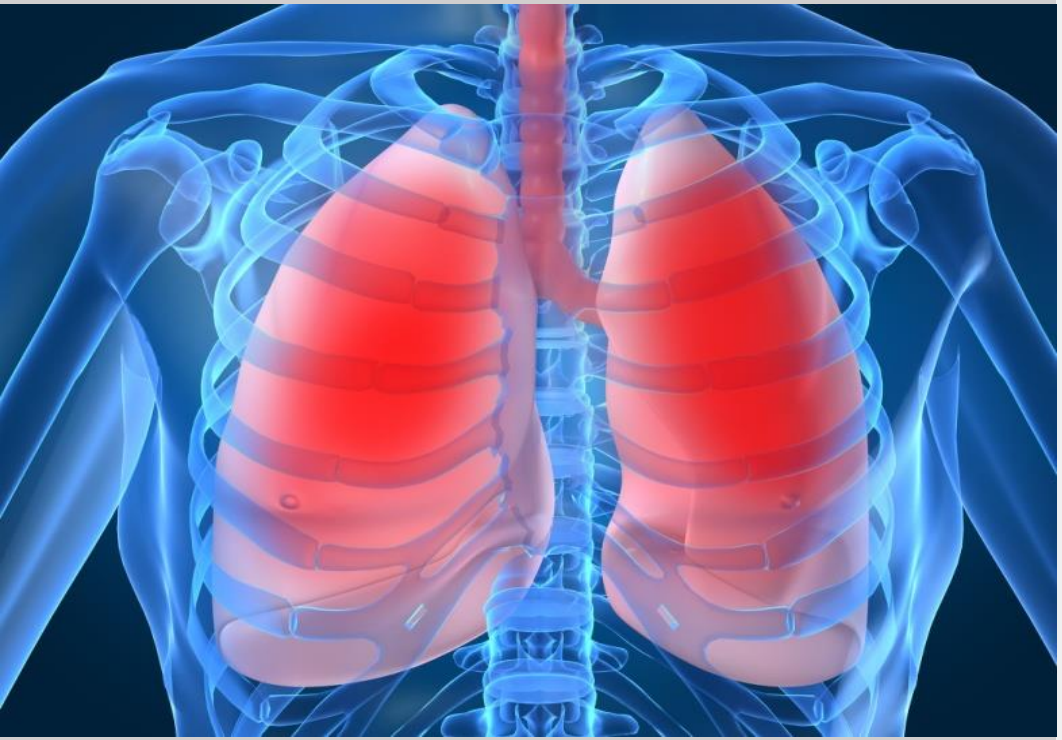

Aspiration

Breathing food or fluid into the airway

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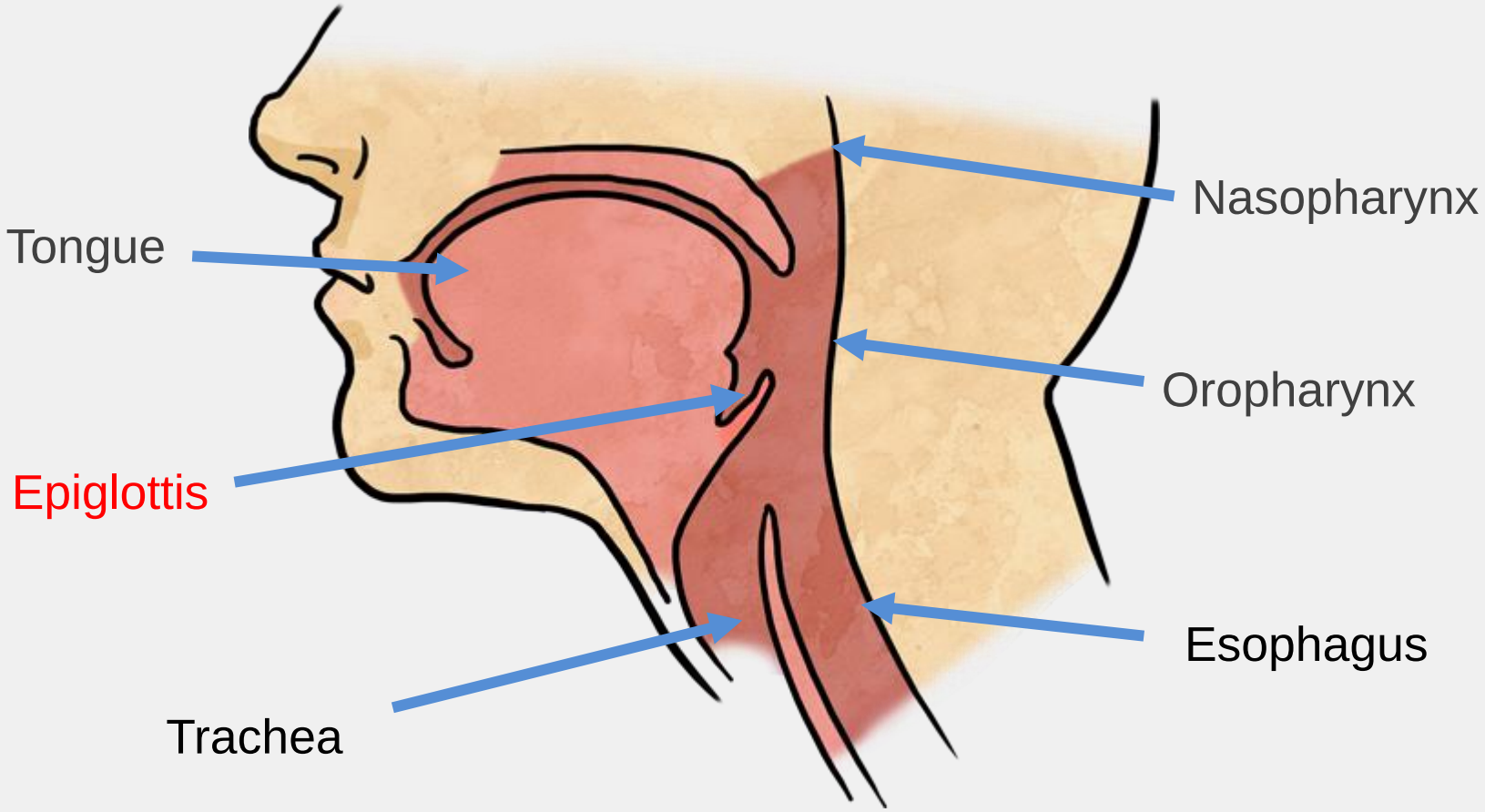
Aspiration

- A high cause of death in people with IDD
- Influenced by many factors
- Individual management and staff training are critical!
- Identifying root cause is vital!
- Can be caused by food going in or out of the stomach

Anatomy of the Head and Neck



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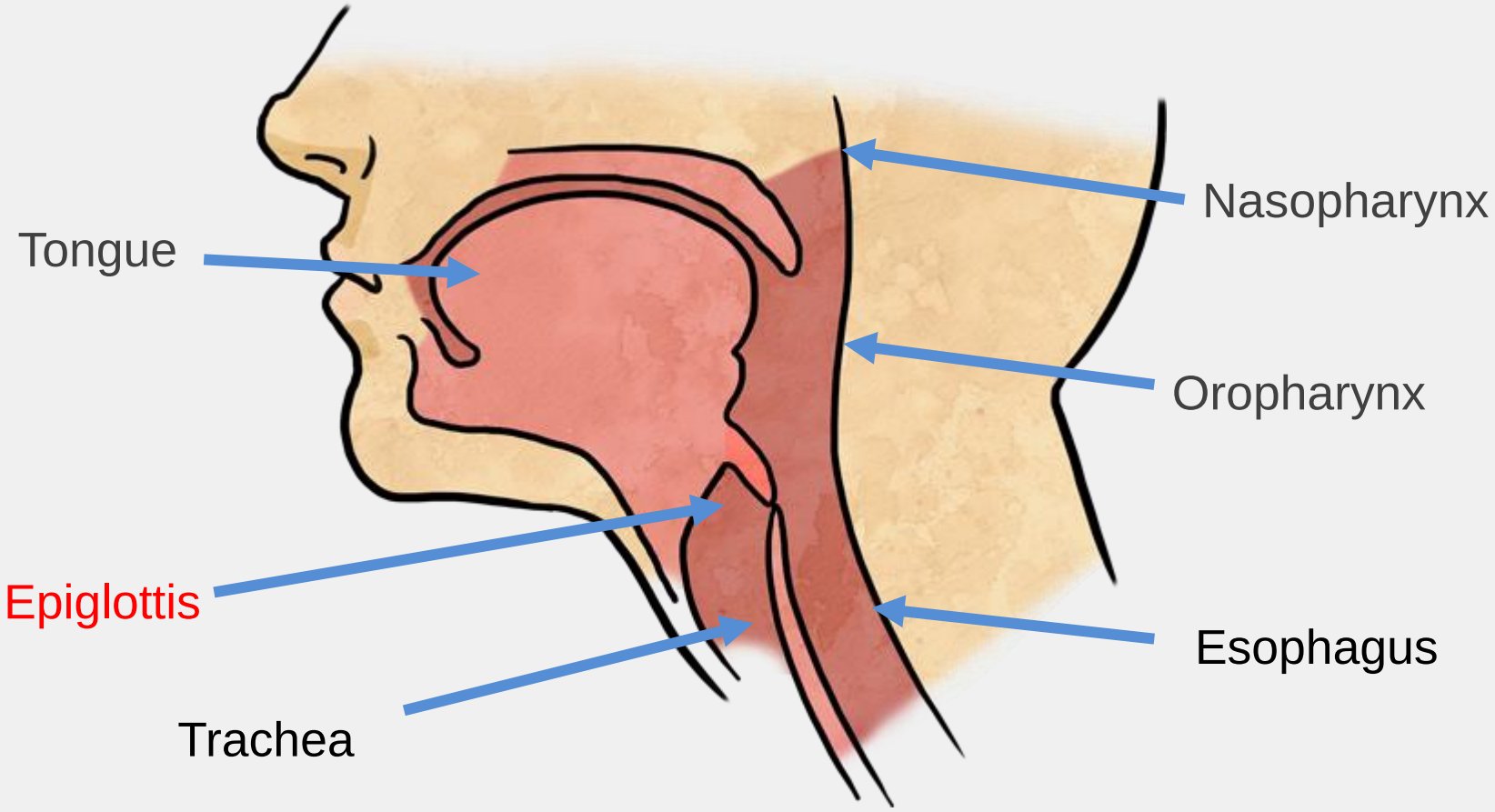
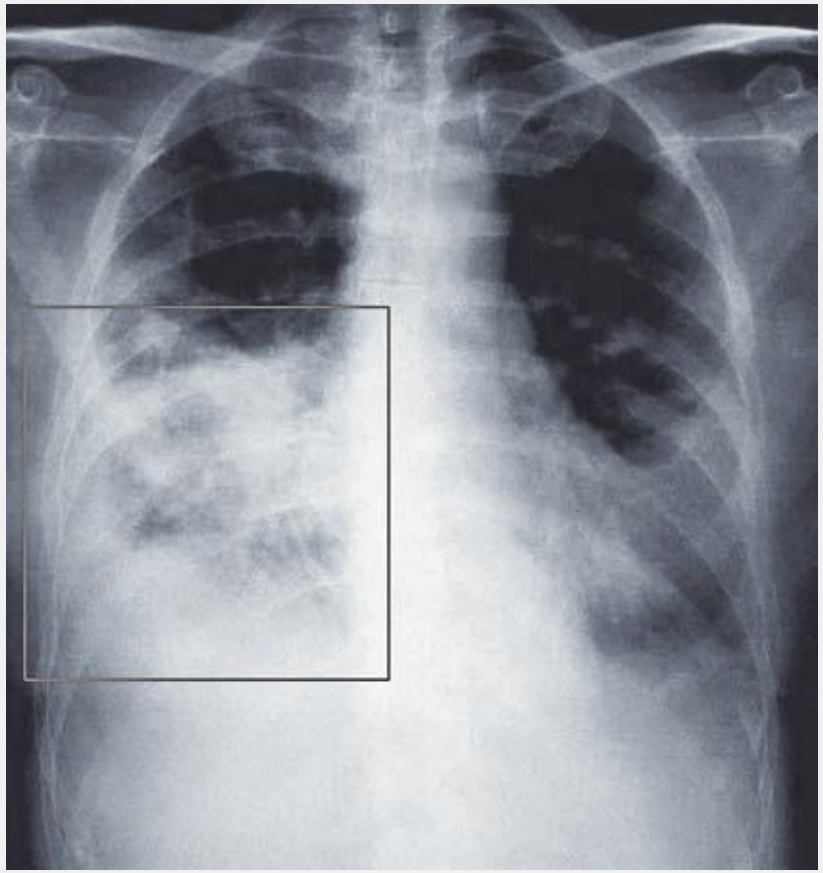
Anatomy of the Head and Neck



Aspiration

- Acute
  - Large quantity of aspirated material
    - Can result in death
  - Smaller quantity
    - Pneumonia
- Recurrent
  - Frequent pneumonia
  - Wheezing



Aspiration – Subtle Signs and Symptoms

- Cough - especially with eating or drinking
- Refusal to drink thin liquids
- Resistance in eating or drinking
- Recurrent pneumonia
- Reactive airway disease

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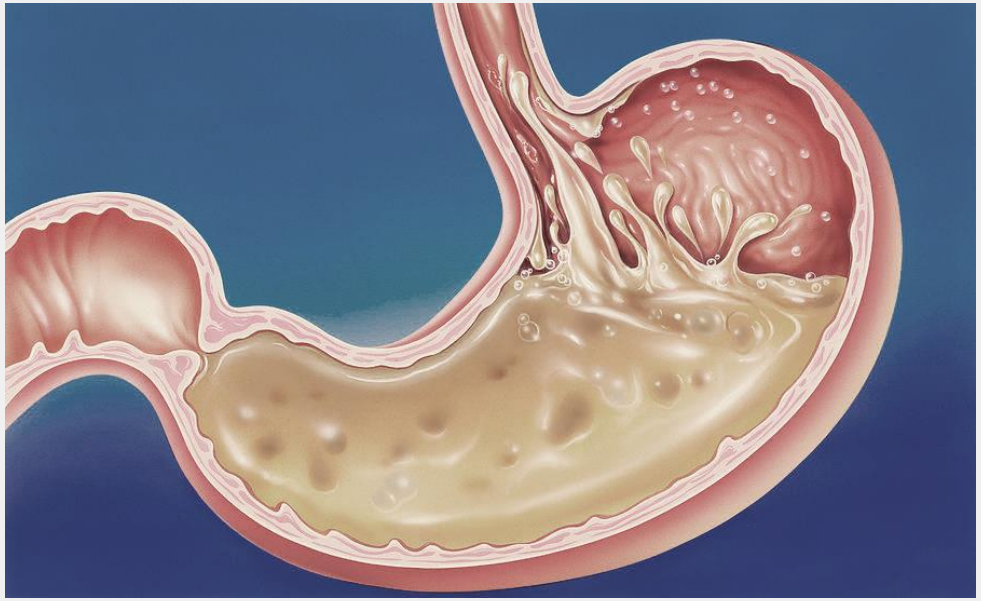
Aspiration - Causes

- Constipation
- GERD
  - Reclined positioning
  - Liquid diet
- Dysphagia
- GI dysmotility
- Sedation
  - Medications
  - Illness



Aspiration - Prevention

- Positioning
- Feeding techniques
  - Feeding evaluation
    - Thickening Liquids
    - Food texture/size
- Test - Modified barium swallow
- PEG Tube
  - Volume/Time
- J-Tube
- J-Tube/PEG

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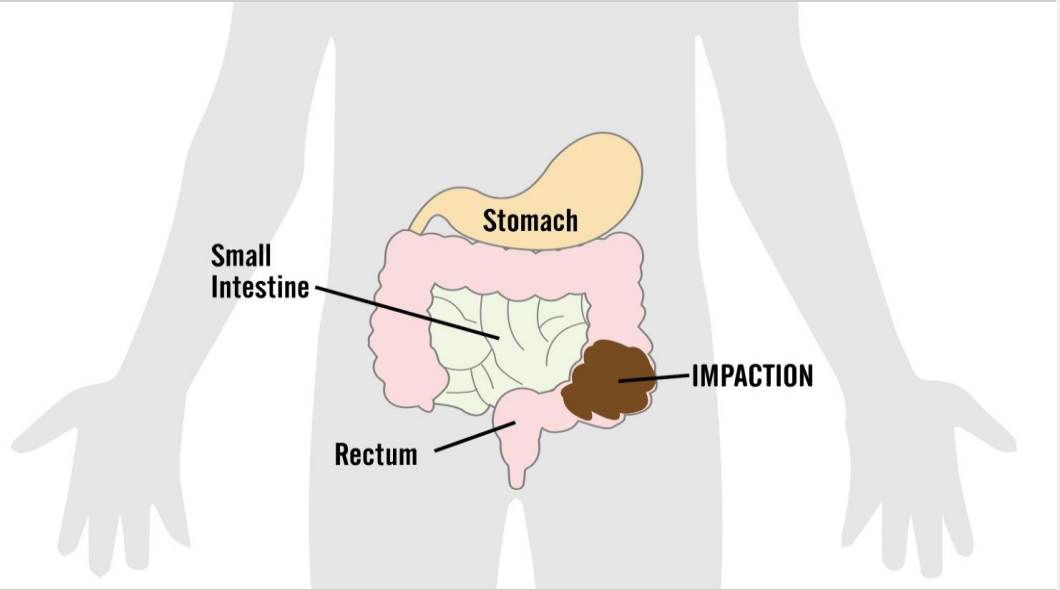
Q&A on Aspiration



Bowel Obstruction

Blocking of movement through the GI tract from scar tissue, lack of movement (peristalsis) or constipation or foreign body

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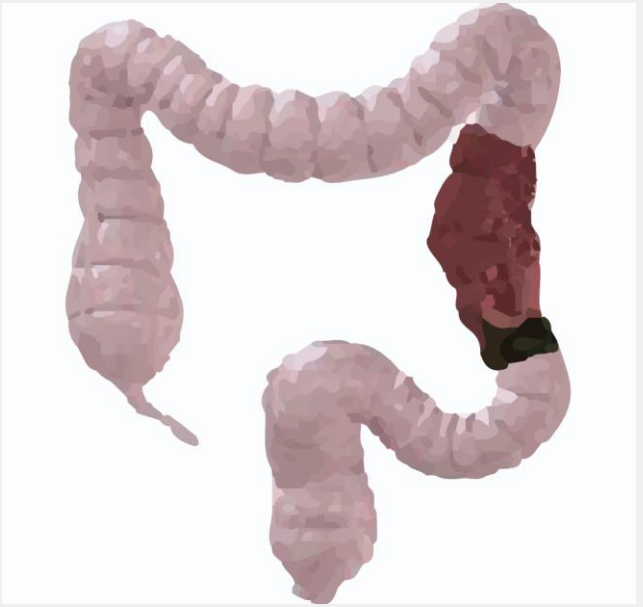
Bowel Obstruction

- Major cause of death in the community
- Inability to communicate pain or other symptoms
- Over-reliance on bowel management medications
- Influence of anti-cholinergic drugs
- Failure to implement early intervention
- Risk of repeat incidents is VERY high!



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The Gastrointestinal Tract

It is impacted by...EVERYTHING

- Medications
- Stress
- Physiology
- Position
- Nutrition/hydration

Constipation

Primary cause of “everything”

- Fever
- Anorexia
- Vomiting
- Seizures
- Medication Intoxication
- Decreased LOC
- Pneumonia
- Behavioral outbursts
- Death

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Constipation - Causes

- Decreased GI motility
- Immobility
- Lack of sensation
- Diet
- Medications
  - Anti-Epileptic Drugs
  - Antipsychotics
  - Iron
  - Anti-cholinergics
  - Opiates
- Pica
  - Common
  - May cause bowel obstruction

Question

Approximately what percentage of people that you support experience problems with constipation on a routine basis?

- 25%
- 50%
- 75%
- 95%

Constipation - Treatment

- Diet
  - Fiber
  - Adequate fluid intake
- Laxatives
  - MOM
  - Mg Citrate
  - Polyethylene glycol
- Suppositories
- Enemas
- Manual dis-impaction

Prevention

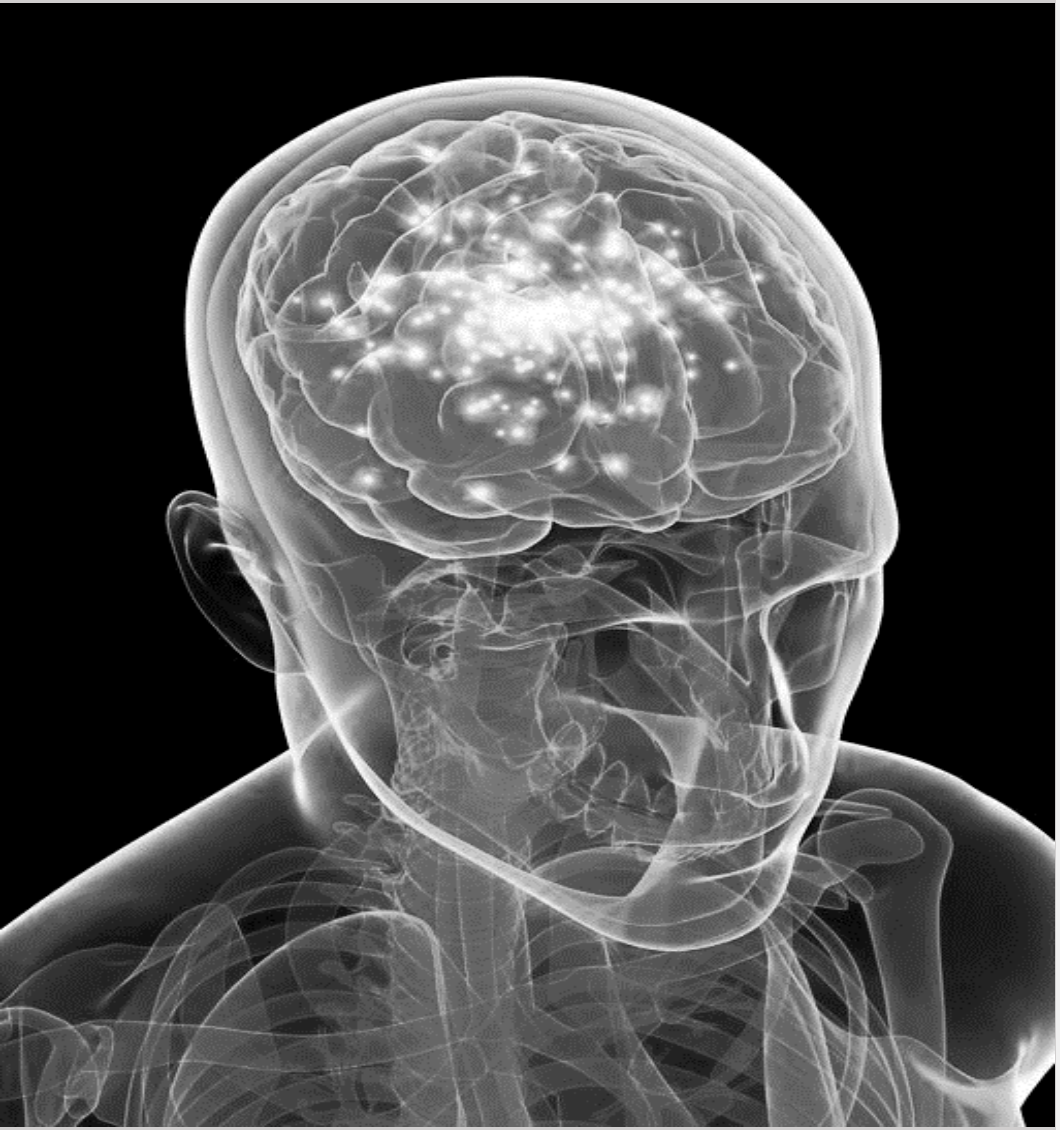
- Avoid use of irritant laxatives
- Provide adequate fluid - 8 oz. for every 6-7 g a day
- Increase dietary fiber gradually - 6-8 g every 2 weeks
- Give time and attention to periods of high gut motility
- Increase physical activity
- Supplement gut flora with yogurt, or pro-biotics with 6 to7 billion organisms per capsule
- Uncooked, high-fiber fruits and vegetables at each meal

Q&A on
Bowel Obstruction

Question

Approximately what percentage of people with IDD has a diagnosis of epilepsy or experiences seizures?

- 5%
- 10%
- 15%
- 25%



Seizures

An alteration in brain function resulting in changes in awareness, or function for a brief period of time

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Seizures

- Can be most severe and difficult to treat
- Varying presentations
- Status epilepticus prevalent
    - Sub-clinical status - rapid eye movements
- Accurate seizure record VERY helpful in management

Seizure Record

HRST
HEALTH RISK SCREENING TOOL

Name: _____ **Case#:** _____

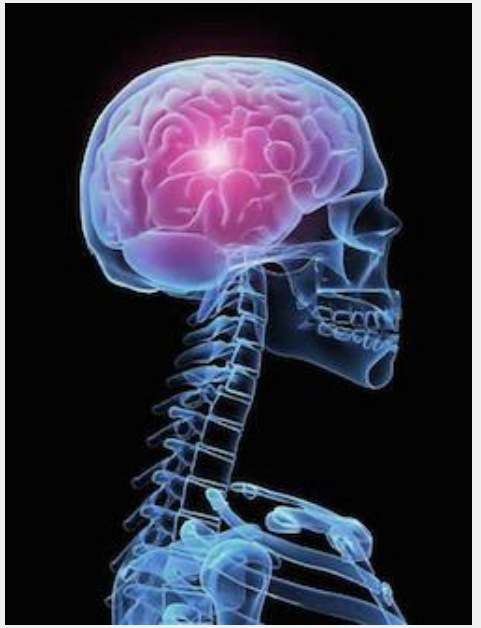
Date	Time	How Long?	Usual Seizure? (check one)		Staring? (check one)		Jerking? (check one)			After Seizure (check all that apply)			Rescue Med?		ER Visit?		Signature/Title
			Y	N	Y	N	L	R	B	Tired	H/A	Sleep	Y	N	Y	N	

Abbreviations:
Y = yes N = no L = left R = right B = both H/A = headache

Seizures

Status epilepticus

- Respiratory suppression
- SUDEP - Sudden Unexplained Death in Epilepsy



Seizures- Precipitation Factors

- Constipation
- Infection
- Medication compliance issues
- Menses
- Age
- Shunt issues
- May see change in LOC
- Head Injury
- Stroke
- Hypoglycemia
- Electrolyte Imbalance

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Seizures

Drug toxicity

- AED's – always one of the top 10 most dangerous drugs

Seizures

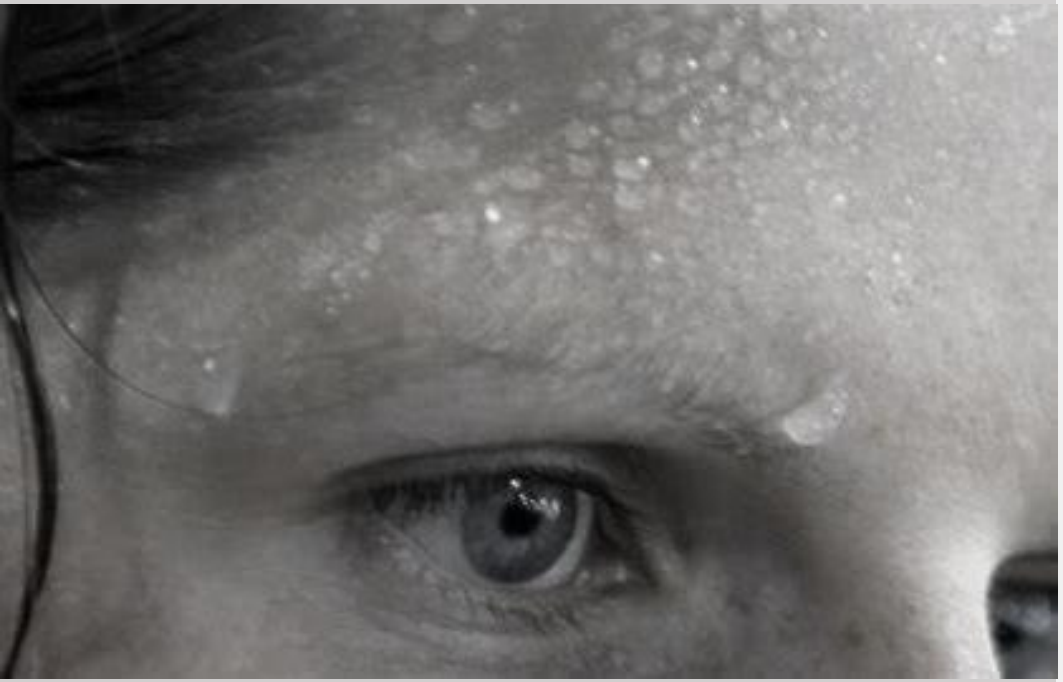
Seizure sequelae

- Aspiration
- Accidents

Seizures – What To Do

- Ease the person to the floor
- Turn the person gently onto one side. This will help the person breathe
- Clear the area around the person of anything hard or sharp. This can prevent injury
- Put something soft and flat, like a folded jacket, under his or her head
- Remove eyeglasses
- Loosen ties or anything around the neck that may make it hard to breathe
- Time the seizure. Call 911 if the seizure lasts longer than 5 minutes. Follow your program's guidelines

Q&A on Seizures



Dehydration

A harmful reduction in the amount of water in the body

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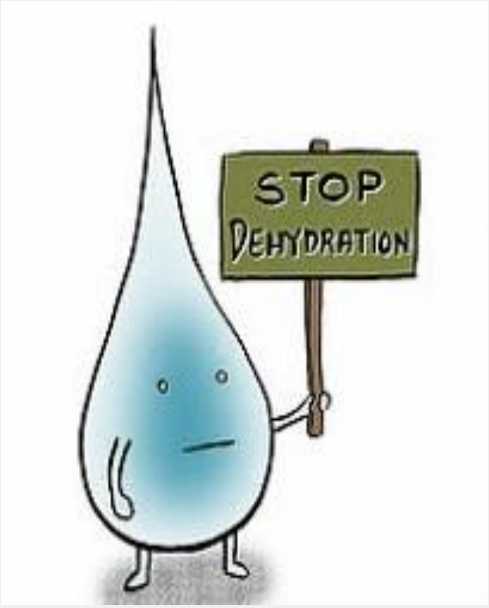
Dehydration

- Vomiting
- Limited intake
    - Limited ability to communicate thirst
    - Immobility to access fluids
    - Loss during intake
    - Medical conditions – DM
    - Staff awareness
- Dysphagia
- Drooling
- If PEG Tube – inadequate amount of fluids provided
- Draining PEG- Excess fluid loss without replacement
    - Follow electrolytes



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Q&A on Dehydration

Sepsis

Blood poisoning due to failure of the immune system to respond to infection

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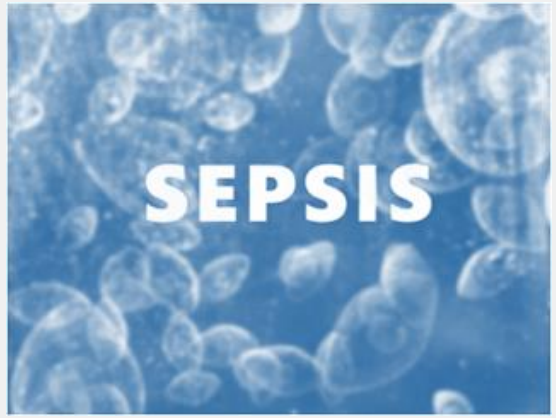
Sepsis

- Also known as Blood Poisoning
- Caused by an infection or its toxin spreading through the bloodstream
- Occurs when large numbers of infections agents invade the bloodstream leading to bacteremia
- Initial infection often comes from:
  - Burn, ulcer or open wound
  - Pneumonia
  - Urinary Tract Infection (UTI)



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Sepsis is a Silent Killer

- A “silent killer” whose early diagnosis could save thousands of lives each year
- Should be treated aggressively
- Very prevalent, costly disease with a high in-hospital mortality rate

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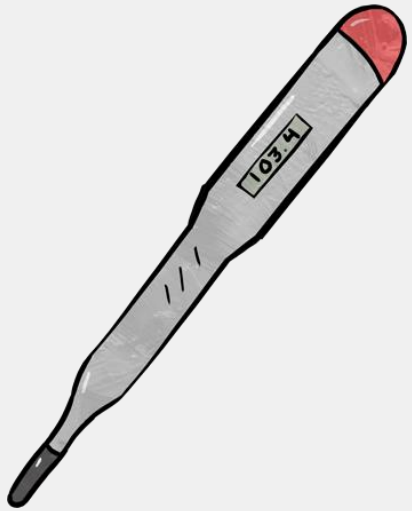
Sepsis – Signs and Symptoms

- High temperature
- Rapid pulse
- Chills
- Low blood pressure
- Mottling of the skin
- Confusion and lightheadedness



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Every hour that passes without treatment raises death risk by 10%

When in doubt, send them out!

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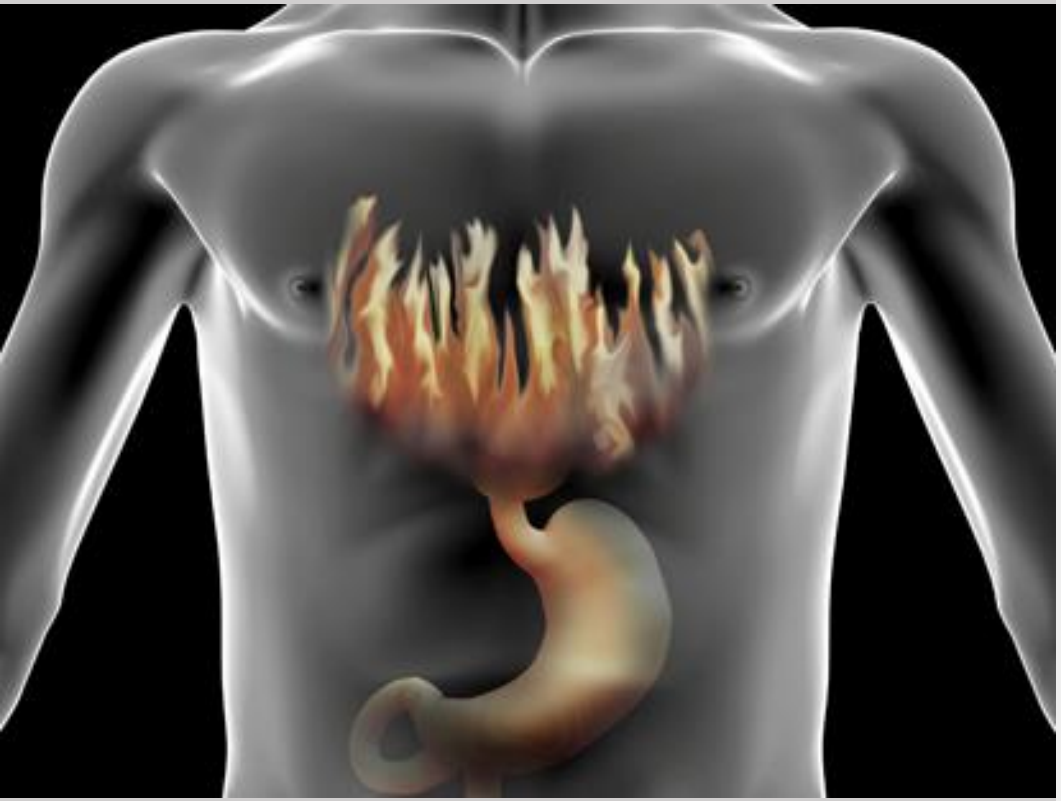
Q&A on Sepsis

Question

Approximately what percentage of the people that you support have a diagnosis of GERD (Reflux)?

- 20%
- 30%
- 40%
- 50% or greater



Gastroesophageal Reflux disease (GERD)

Back flow of partially digested food and acid into the esophagus causing pain and inflammation

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Gastroesophageal Reflux disease (GERD)

- Multiple causes of death
  - Massive GI bleed
  - Esophageal cancer
  - Aspiration of stomach contents

Common Signs Not Recognized

- Pica
- Hands in mouth
- Agitation within 30 minutes of eating
- Refusing meals
- Agitation and restlessness in the middle of the night
- Clinical signs: eroding hemoglobin, hematocrit and albumin (blood protein)
- Unplanned weight loss regardless of intake

Diagnosis

- PH monitor
- Barium Swallow
- Endoscopy
- Oxygen Saturation decreasing at any time during or after mealtime

MEALTIME
PULSE OXYMETER STUDY

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REPLACING RISK WITH HEALTH AND WELLNESS

GENERAL GUIDELINES

1 BASELINE
SpO2 and pulse normals outside of eating. This is best done for one minute just before mealtime.

2 MEALTIME RANGE
Impact of eating on SpO2 and pulse once coordination of respiration and swallowing has begun. This is compared to the baseline.

SIGNIFICANT IF
SpO2 drops into 80's. SpO2 does not rebound into 90's (best if 93% plus.) Values decline steadily over course of meal. Pulse rate increases and stays excessively elevated without returning close to baseline rate.

3 LENGTH OF MEALTIME
Mealtimes which require longer than 30 minutes to complete place the person at risk for fatigue leading to further problems with coordination of respiration and swallowing.

4 COUGHING EPISODES
Observe amount of coughing during mealtime and its effects on SpO2 and pulse. A good clearing cough should result in a rise in SpO2 to 95% or greater, facilitating 02/CO2 exchange.

Generally, a poor or inadequate clearing cough will not affect the SpO2or cause it to drop even further. Excessive coughing during mealtime can increase fatigue and increase the risk of aspiration.

5 COUGHS WITH COLOR CHANGES
Generally indicates aspiration of mucus/food/fluids in significant amounts. If either wheezing or apnea episodes are also present, the overall seriousness of the aspiration episode increases.

6 DECLINE OF SpO2 DURING AND/OR SHORTLY FOLLOWING MEALTIME
Answer "yes" or "no" by comparing the average SpO2 during the meal to the average baseline. Many individuals are experiencing "silent aspiration". Decline of SpO2 values into the 80's can indicate aspiration even if coughing is not present. Decline of SpO2 values after mealtime may be indicative of the onset of reflux with aspiration. Readings are observed at 5 minutes and 30 minutes after the meal.

7 OXYGEN SATURATION
SpO2 during eating and drinking is also recorded in terms of the highest, lowest, and most common value. If SpO2 values are below normal limits (95%), they are further evaluated according to what percentage of time is spent below 90%, 85%, 80%.
Many individuals with chronic respiratory diseases (COPD, ARDS) have lower baseline SpO2 values. These individuals may normally run between 80-85%.

8 INADEQUATE SpO2 DURING MEALTIMES
Decreases alertness and general CNS function, which includes movement in the oral structures. Hinders the efficiency of coordination of respiration and swallowing.

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MEALTIME
PULSE OXYMETER STUDY

IntellectAbility
REPLACING RISK WITH HEALTH AND WELLNESS

GENERAL GUIDELINES

Name: Jim Jones Date: 2/2/17

Assessed by: K. Green, RN

Time Start: 12:15pm
Time End: 12:45pm
Baseline SpO2: 95% Pulse: 90
Mealtime Range SpO2: 91–98 Pulse: 89–108
Length of Mealtime: 22 min.
Coughing Episodes: 3
Single Coughs: 0
Coughs with Color Change: 0
Decline of SpO2 During: none Following: none

Five Minutes Post Meal
SpO2: 92 for 2 min, then 93–98 Pulse: 99

Thirty Minutes Post Meal
SpO2: 95 steady Pulse: 99

Oxygen Saturation (SpO2)
Highest: 98 Lowest: 91 Avg.: 94–99

Percent of Time Below
90%: 0 85%: 0 80%: 0

Interpretation
1) Minimal fluctuation in Sp02/pulse during meal.
2) Sp02/pulse minimally changes from baseline during meal.
3) Three single coughs w/l 30 minute post-meal period. Sp02 and pulse not significantly affected.
4) No "wet" respirations noted during or after the meal.
5) Position upright in wheelchair with head in midline and neutral position.

Q&A on GERD

Fatal Five Plus

- Aspiration
- Bowel Obstruction
- Seizures
- Dehydration
- Sepsis
- + GERD

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Intellectual/developmental disability is never a root cause of death!

- Cerebral palsy does NOT cause constipation
  - Lack of movement DOES!

- Cerebral palsy does NOT cause aspiration
  - Changes in body structure due to abnormal movement DO!

Prevention

The most important part of fixing a problem is figuring out what the problem is.

Finding the Solutions

- Recognize the signals of trouble
  - They are always there

- When in doubt, send them out
  - Don’t be afraid to advocate on your person’s behalf
  - People don’t have to like you!

Attitudes and Perceptions

- Never discount anything reported by parents or front-line staff
- Always find a way to present your person in the best possible light
- Help others see that good health is worth achieving
- Be an ambassador

Final Thoughts…

- Always know if a person's condition is getting better or worse
- Have an early warning system to detect destabilization
- Do not let chronic health issues become routine or invisible
- Records MUST provide useful data about trends
- Monitor residential settings to assure health and safety

Q&A

Thank You!

Craig Escudé, MD, FAAFP, FAADM
Craig@ReplacingRisk.com

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The Fatal Five eLearn Courses

Now available for individual use!

Fatal Five: Fundamentals

Duration: 4-6 hrs

Designed for Direct Support Professionals and general staff. It covers the Fatal Five by clearly defining and illustrating what each item is, how to spot them, who is at risk, what to report and when staff should alert their medical manager or send the person to the emergency room.

LEARN MORE

Fatal Five: Advanced

Duration: 4-6 hrs 7 CEUs

This course is designed for clinicians. It covers each Fatal Five item with greater depth with an eye to precise signs and symptoms and greater stress on health and safety repercussions. It stresses how to train staff on each item and how to help staff act as a set of eyes and ears so that health issues can be reported clearly as they happen.

LEARN MORE

Fatal Five: Case Managers

Duration: 4-6 hrs

"Just because you are not a clinician does not mean you cannot clinically advocate for someone."

Train your staff in the Fatal Five Fundamentals with added direction on utilizing this information as a Case Manager so they can better understand how to use these new skills to increase the health and safety of those they support.

LEARN MORE

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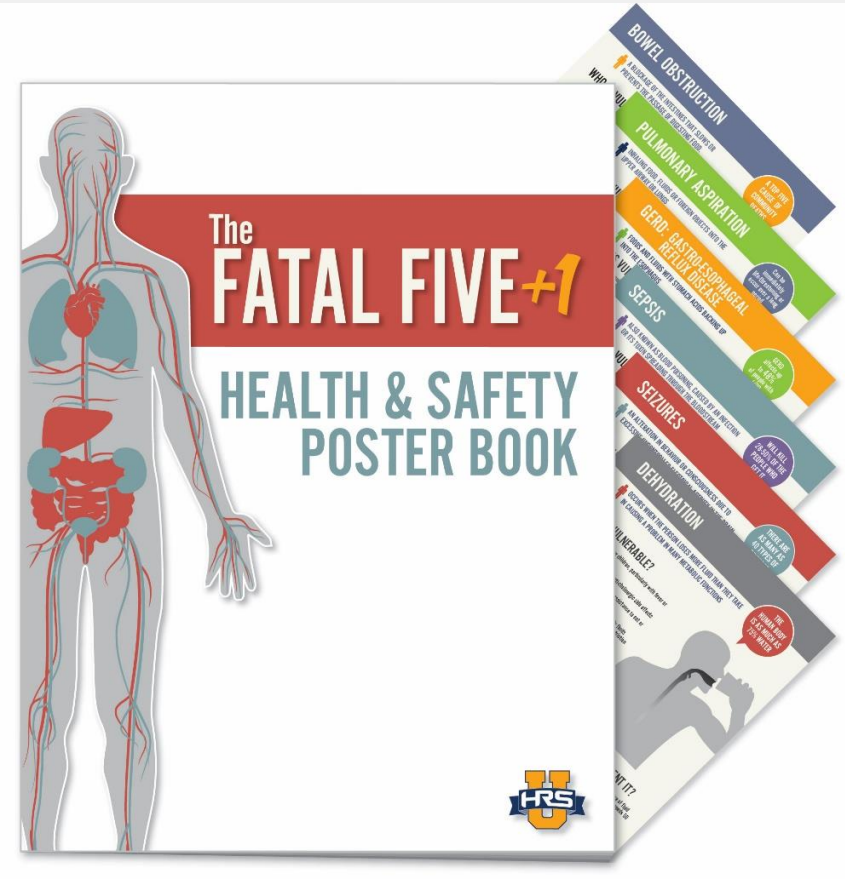
Contact us today at inquiries@ReplacingRisk.com for pricing or additional information!

Poster Books



All 6 posters are now available in one convenient booklet form. It is 8.5" X 11", when opened the posters 11" X 17".

The book includes:

- Bowel Obstruction
- Pulmonary Aspiration
- GERD
- Sepsis
- Seizures
- Dehydration

Visit ReplacingRisk.com

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