

# KEEP CALM and PASS NCLEX with MARK KLIMEK Review

1.

## Acid-base balance/ventilators

Rule of the **B's**.. If the **pH** & the **bicarb** are both in the same direction = **metab**olic  
If they are in different directions = **respiratory**

pH = **7.35-7.45** acidosis/alkalosis  
HCO<sub>3</sub> (bicarb) = **22-26** (2+2+2 = 6)  
CO<sub>2</sub> = **45-35**

ex:

pH: 7.30 = ↓

bicarb: 20 = ↓ = metabolic acidosis

ex:

pH: 7.58 = ↑

bicarb: 32 = ↑ = metabolic alkalosis

ex:

pH: 7.22 = ↓

bicarb: 30 = ↑ = respiratory acidosis

ex:

You are providing care to a client with the following blood gas results: pH 7.32, CO<sub>2</sub> 49, HCO<sub>3</sub> 29, PO<sub>2</sub> 80 & SaO<sub>2</sub> 90%. Based on the results, the client is experiencing:

↓ = acidosis, ↑ = respiratory

-opioid: CNS depressant.. know the symptoms (sedation, respiratory depression, etc)..

\*principle: acid base signs/symptoms..

**as the pH goes... so goes my patient!!!**

-when pH goes up; patient goes up.. (everything gets irritable!)

-when pH goes down; patient goes down! (systems in your body shut down)

**...except with potassium:** when pH goes up; potassium goes down... when pH goes down; potassium goes up!

(up) alkalosis: irritability, hyper-reflexia (3 & 4), tachypnea, tachycardia, **borborygmi** (increased bowel sounds), seizure, aspirate..

(down) acidosis: hypo-reflexia, bradycardia, lethargy (obtunded), paralytic ileus (decreased bowel sounds), coma, respiratory arrest (ambu-bag!!)

**Kussmaul breathing** is a *deep and labored breathing pattern* often associated with severe metabolic acidosis, particularly diabetic ketoacidosis (DKA) but also kidney failure... **MAC Kussmaul!!**

**M:** metabolic

**AC:** acidosis

ex:

pT has **respiratory acidosis**... (select all that apply)..

**+1 reflexes**

diarrhea

**adynamic ileus**

spasm

**urinary retention**

tachycardia

**2nd degree Mobitz type 2 heart block**

hypokalemia

**SATA questions: \*never only 1... never all of them\***

*diarrhea will cause a metabolic acidosis.. but once you get acidotic, it will shut your bowels down = paralytic ileus*

...with scenarios.. always ask first **“is it lung?” = respiratory**

...then ask if the pt is **over-ventilating or under-ventilating?**

**over-ventilating = alkalosis**

**under-ventilating = acidosis**

...it's about the SaO<sub>2</sub>!!! (pay attention!!)

if it isn't lung = **metabolic**..

if pt has prolonged gastric **vomiting or suctioning**... it's always **metabolic alkalosis**... why? losing acid = becomes basic..

*for everything else that is not lung - choose **metabolic acidosis**..*

-if you don't know the answer... always answer **metabolic acidosis**..

## ventilators

alarms.. *high pressure alarm...* triggered by increase resistance to air flow.. (machine is pushing too hard to get air into the lungs).. **respiratory alkalosis**

3 obstructions: **kink** in tubing (get kink out), **water condensing within the tube** (empty tube), **mucus secretions in the airway** (turn, cough, deep breathe... then suction).. suction as needed!! \*in that order\*...

*low pressure alarm.. decreased resistance (too easy for the machine..)*

### **respiratory acidosis**

Low pressure alarms are triggered by decreased resistance to airflow & can be caused by disconnections of the main tubing or oxygen sensor tubing... **Tubing (reconnect it!) - oxygen sensor tube (reconnect it UNLESS tube is on the floor - bag them & call Respiratory therapist if this happens)**

Respiratory **alkalosis** = ventilator setting may be too **high**.

Respiratory **acidosis** = ventilator setting may be too **low**.

What does “wean” mean? gradually decrease with the goal of getting off altogether

ex:

Doc says wean off vent in AM... 6am ABG's show **resp. acidosis**...

- a) follow order
- b) call respiratory
- c) hold order.. call doc**
- d) begin to decrease the settings

**MASLOW's** Priorities (HIGHEST - LOWEST)

physiological

safety

comfort

psychological (problems within the person)

social (problems with other people)

spiritual

ex:

Arrange from HIGHEST - LOWEST...

denial, spiritual distress, pain in elbow, fall risk, pathological family dynamics & electrolyte imbalance...

= electrolyte imbalance (physiological), fall risk (safety), pain in elbow (comfort), denial (psychological), pathological family dynamics (social) & spiritual distress (spiritual)

## **2.**

**alcoholism**.. (or any abuse)

**#1 problem = denial** \*refusal to accept the reality of a problem\*

You treat denial by **confronting it**...

pronouns ~  
good: i...  
bad: you...

positions ~  
good: i'm having a difficult time reading this...  
bad: you wrote it wrong..

loss & grief: **D**enial **A**nger **B**argaining **D**epression **A**cceptance  
don't confront it; support it..

ex:  
You have a pt that just had a hand amputated & they say, "I can't wait to get back to playing the piano"... You say "Oh, how long have you played, etc? - you **NEVER** say "You can't because you only have 1 hand"

**abuse = confront**  
**loss = support**

**#2 problem = dependency** \*when the abuser gets the significant other to do something.. "Call my boss, i'm sick"\* (abuser gets to keep abusing..)  
= **co-dependency** \*calls the boss\*... (positive self esteem)

How to treat this?!? **Set limits and enforce them...** Learn to say **NO!**

**manipulation** = when the abuser gets the significant other to do things for him or her... the nature of the act is dangerous or harmful

how is it like dependency? the abuser is getting the other person to do something

no harm = **dependent / co-dependent** (wife buying alcohol for husband)  
dangerous/harmful = **manipulated** (kid buying alcohol for father)  
...depends on legal/illegal.....

**Wernicke-Korsakoff Syndrome (WKS)** is a neurological disorder. Wernicke's **Encephalopathy** and Korsakoff's **Psychosis** are the acute and **chronic** phases, respectively, of the same disease. *WKS is caused by a deficiency in the B1 vitamin thiamine.* **Thiamine** (B1) plays a role in metabolizing glucose to produce energy for the brain.

**primary symptom of WKS = amnesia with confabulation** (making up stories) \*they believe the lie..\*

ex:  
You have a pt who believes he is Ronald Reagan's National Security Officer... And they want to go to a cabinet meeting... :/ **WHAT DO YOU DO?!?** Redirect!! ("well, why don't you get a shower and then we'll go watch CNN and see what the news is in Washington D.C.")

WKS is...  
-It's preventable & arrestable (stop it from getting worse) - **Take vitamin B1**  
-Irreversible... \*About 70%\*

### **Antibuse (disulfiram)**

-alcoholism medication \*aversion therapy!\*

It can treat problem drinking by creating an unpleasant reaction to alcohol. It's used in recovery programs that include medical supervision and counseling.

How long does it take to *get into & out* of their system... **2 weeks**

### **Patient teaching - teach how to avoid NAUSEA, VOMITING & DEATH**

**NO:** mouthwash, aftershaves, perfumes/colognes, insect repellants, -elixer (Robitussin), alcohol-based hand sanitizers, un-cooked icings (vanilla extract)...

*However, they CAN have RED WINE VINAGERETTE!*

Overdoses/Withdrawals...

Every **abused** drug is either an **upper** or a **downer**...

\*Laxative (not upper or downer) but can be abused by the elderly..

UPPERS: caffiene, cocaine, PCP/LSD, methaphetamines, adderall..

Signs/symptoms: things go up... euphoria, tachycardia, restlessness, irritability, diarrhea, **reflex 3/4**, spastic - suction!!!

DOWNERS: heroin, alcohol, marijuana, etc.

Sign/symptoms: things go ↓ ~ lethargic, respiratory depression, bradycardia, reflex 1/2, - ambubag!!!

2 steps...

Step 1: ask yourself, **is it an Upper or Downer**

Step 2: ask yourself, **is it an Overdose** (too much) or **Withdrawal** (not enough)

If they say: “**overdosed on an upper**” (too much upper)... pick ↑ things!!

If they say: “**downer & intoxication**” (too much DOWNER)... pick ↓ things!!

If they say: “**withdrawal downer**” (don't have enough downer; too little!)

***Too little downer makes everything go up..  
Too little upper makes everything go down..***

***Upper overdose LOOKS LIKE downer withdrawal...  
Downer overdose LOOKS LIKE upper withdrawal...***

2 situations (highest priority) =

**Respiratory depression/arrest:** Downer overdose/upper withdrawal..

**Seizure:** Upper overdose/downer withdrawal...

ex:

Overdose on cocaine: UPPER/OVERDOSE.. (too much UPPER) \*aka everything goes ↑\*

What would you expect to see? (select all that apply)

**-irritability, reflex 3/4, increased temp, borborygmi (increased bowel sounds)**

Withdrawing from cocaine.. -Make sure the RR is above 12! Need NARCAN!!!

Drug addiction in the NEWBORN ☹

**Always assume intoxication, not withdrawal at birth**

...After 24 hours - it's in withdrawal..

You are caring for an infant born to a equaline (pain killer) addicted mother... It is 24 hours after the birth... What do you expect to see.. SELECT ALL THAT APPLY: **difficult to console**, low core body temp, **exaggerated startle reflex**, respiratory depression, **seizure risk**, **shrill high pitch cry**...

alcohol withdrawls = 24 (stable; not life threatening) \*AWS\*

delirium tremens = 72 hours (unstable; can kill you) \*DTS\*

AWS: **regular diet, semi-private anywhere, up ad lib, no restraints..**

DTS: **NPO/clear liquid (seizure), private/near nurse's station, restricted bed rest (bed pans/urinals), restrained (VEST or 2 point locked leathers \*1 arm & opposite leg\*)...**

**AWS & DTS get a anti-hypertensive (BP pill)** - everything is going up - keep everything down... They both get a tranquilizer, because their up... multivitamin \*b1\* to prevent WKS.

## DRUGS:

**aminoglycosides** - powerful antibiotics (the **BIG GUNS!!!**)

think: **a mean old mycin** = serious, life threatening, resistant, gram negative (TB, etc.)... if it ends in mycin = mean old mycin

\*not mean old mycins: ery**th**romycin, zithromycin, clarithromycin (thro)

**if it has thro = throw it off the list...**

toxic effects:

mycin = mice (ears)... **oto-toxic!!** -monitor **hearing, tinnitus, vertigo** (equalibrium)

human ear shaped like kidney... **nephro-toxicity!** -monitor creatinine (best indicator for kidney function)... 8 (fits in a kidney) toxic to **cranial #8** and you administer them Q8H... route: IM or IV.. do not give PO, because they are not absorbed..

**ORAL** mycins: **hepatic coma** (liver coma) amonia level gets too high.. **pre-op bowel surgery** (to clean the bowel)... #1 action: sterilize the bowel... which?! **neomycin and canomycin...**

**"Who can sterilize my bowel?! NEO KAN!!!"** ☺

T: **trough**: when the drug is at its lowest...

A: **adminster**

P: **peak**: when the drug is at its highest...

**Why do we do a TAP?! (narrow therapeutic window) what works/what kills...**

Lasiks: 10-120 (wide)  
Dig: 0.125 - 0.25 (narrow) DO a TAP!

IV push..

*TROUGH: b4 sub: 30 mins.. b4 iv: 30 mins.. b4 IM: 30 mins... b4 subQ: 30 mins.. b4 PO: 30 mins..*

*PEAK: after sub: 5-10 mins.. after iv: 15-30 mins.. after IM: 30-60 mins... after subQ: SEE Diabetes lecture.. after PO: DON'T WORRY ABOUT IT..*

3.

**Calcium Channel Blockers:** are like VALIUM for your ♥!!!

...calms you down.. calms the heart down!

*Tachy = yes*

*shock = no*

negative inotropic, negative chronotropic, negative dromotropic = calm/relax... cardiac depressant

-what do they treat: antihypertensives, anti-angina, anti-atrial-arrhythmia, SVT (atrial)

Side effects: HA, HTN

Name: **ends in -dapine... + Cardizem & Verapamil...**

Cardizem (can be continuous IV)

**-Check BP: Hold CCB if SYSTOLIC is < 100!**

Cardiac Arrhythmias - knowing how to read EKG strips...

Know these **4 patterns!!**

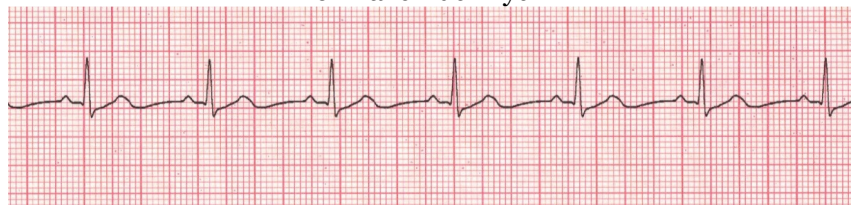
**1) normal sinus rhythm**

**2) v-fib (no pattern)**

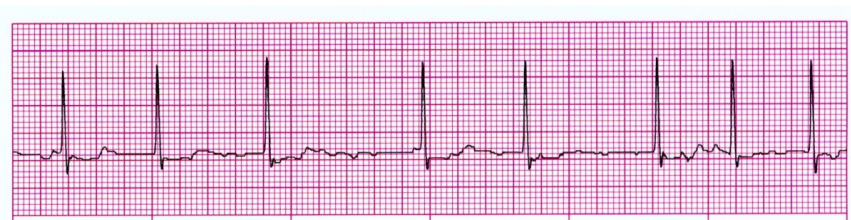
**3) v-tach (there's a pattern)**

**4) asystole**

normal sinus rhythm



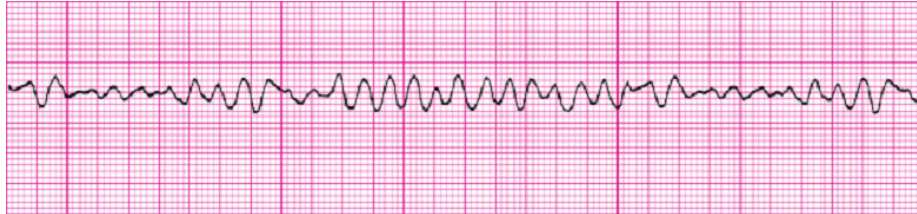
a-fib



a flutter



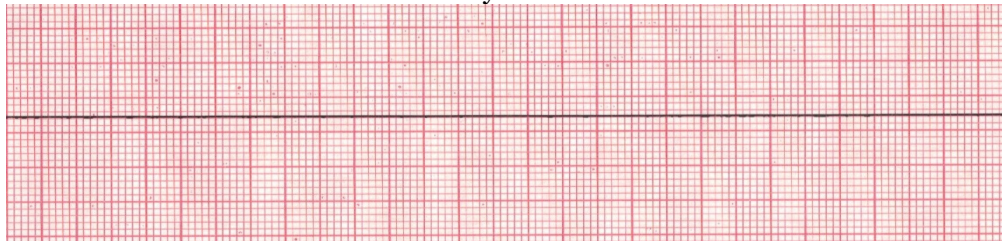
v-fib



v-tach



asystole



**QRS** de-polarization = **ventricular**

**P wave** = **atrial**

6 rhythms...

-a lack of QRS's = asystole

-saw tooth = a flutter

-**chaotic** = atrial **fibrillation**

-chaotic = ventricular fibrillation

-QRS = ventricular **tachycardia (bizarre)**

-**periodic** bizarre wide QRS = **PVC** (low priority... can elevate to moderate: if there are more than 6/min.. or more than 6 PVC's in a row.. or if the PVC falls on the T wave of the previous beat) PVC's never reach HIGH..

LETHAL arrhythmias.. (they will kill you in 8 minutes or less)

-**asystole (HIGH)**

## **-v fib (HIGH)**

...have in common: NO cardiac output (pulse).. NO brain perfusion.

\*Potentially\* LIFE threatening

v-tach... (they have a cardiac output)

TREATMENTS...

PVCs/V-TACH: Ventricular... A (**amioderone**)

Atrial: ABCD's

**adenocard (adenosine)**; push in <8 seconds... \*asystole for about 30 seconds!\*

**beta blockers** (side effects: HA/HTN) \*no asthma!\*

**calcium channel blockers**...

**digitalis** (digoxin, lanoxin)

**V-FIB: you D-FIB... Shock them!**

**Asystole: EPI & atropine..**

## **CHEST TUBES**

-purpose: re-establish negative pressure in the pleural space (need negative pressure for air exchange)

**\*Look for the reason why it was placed!\***

**pneumothorax** (air = positive pressure.. put chest tube in to re-establish negative pressure!)

**hemothorax** (blood= positive pressure.. put chest tube in to re-establish negative pressure!)

**pneumohemo** (air & blood = positive pressure.. put chest tube in to re-establish negative pressure!)

...what do you expect from a hemo chest tube: drain blood...

LOCATION of the tube.. **APICAL** (**high; air**) & **BASILAR** (**bottom; blood**)

**example: unilateral pneumohemo.. apical for pneumo & basilar for hemo**

**bilateral pneumo: 2 apicals**

chest trauma: **unilateral (always assume its unilateral)**

**post op R pneumonectomy (no chest tube!!)**

TROUBLE SHOOTING:

Knocked it over... **DON'T** freak out!

Water seal breaks...? **CLAMP** IT!!! (so nothing gets in).. **CUT** IT AWAY FROM BROKEN DEVICE... **SUBMERGE** TUBE UNDER STERILE WATER!!! **UNCLAMP** IT...

**FIRST: CLAMP**

**BEST: SUBMERGE** (re-establishes water seal)

KNOW FIRST vs BEST...

V-Fib.. BAD!

FIRST: place backboard..

BEST: chest compressions..

What do you do if the chest tube gets pulled out?

**FIRST:** takes a gloved hand and cover the hole.. **BEST:** cover it with vaseline gauze!!

BUBBLING (chest tubes)

**Ask where & when...**

...Sometimes bubble is good & sometimes it's bad - depends on where & when!

Bubbling, bubbling, bubbling... Where? Water seal.. When? Intermittent = GOOD! Document that!

Bubbling, bubbling, bubbling... Where? Water seal... When? Continuous = BAD!  
= LEAK... You do not want continuous bubbling in the water seal.

Bubbling, bubbling, bubbling... Where? Suction control chamber.. When? Intermittent = BAD...  
Suction is not high enough

Bubbling, bubbling, bubbling... Where? Suction control chamber.. When? Continuous = GOOD..  
Document that!

\*If something is sealed, should you have a continuous bubbling? **NO**.

**straight cath is to a foley catheter as a thorocentesis is to a chest tube..**

**Rules for clamping a tube:** do **NOT** clamp longer than **15 seconds** without a doctor's order... What happens if you break the water seal? CLAMP it! How long do you have to get it under water? 15 seconds, or you gotta unclamp.. Have sterile water bottles nearby! Use **rubber** tip double clamps...

**CONGENITAL HEART DEFECTS** (trouble or no trouble; either causes a lot of problems or it's no big deal at all - there is no in between)

**TRouBLe**

**Trouble defect shunts blood: RIGHT to LEFT (cyanotic);** needs surgery, delayed growth, decreased life expectancy, needs more time in the hospital/pediatric cardiologist

**NO-trouble defect shunts blood: LEFT to RIGHT (pink);** doesn't need surgery, normal growth, normal life expectancy, only 24-36 hours in the hospital/pediatrician/NP..

40 some congenital heart defects..

**TROUBLE:** All start with the letter "T"; if it does not start with a "T"; it's not trouble.

**TROUBLE:** tetralogy of fallot, truncus arteriosus, transposition on the great vessels, transposition on the great arteries, tricuspid atresia, total anomalous pulmonary venous return (TAPV), left ventricular hypoplastic syndrome...

**NO TROUBLE:** ventricular septal defect, patent ductus arteriosus, patent foramen ovale, atrial septal defect, pulmonic stenosis...

...ALL congenital heart defect kids (whether trouble or not) will have 2 things in common: they will **all have a murmur** (because the shunt of the blood) & **they all have an ECHO done**.

4 defects of **tetralogy of fallot**:

- VD (ventricular defect)
- PS (pulmonary stenosis)
- OA (over-riding aorta)
- RH (right hypertrophy)

**V**arie**D** **P**icture**S** **O**f **A** **R**anc**H** (initials)

## **INFECTIOUS DISEASE & TRANSMISSION BASED PRECAUTIONS**

4 types...

STANDARD/UNIVERSAL:

**CONTACT**: for anything enteric (fecal/oral); c-diff, hep a, cholera, staph infections, RSV (however it is transmitted via droplet), herpes.. **PRIVATE ROOM IS PREFERRED.. GLOVES, GOWN, HAND WASHING, DISPOSABLE SUPPLIES..**

**DROPLET**: bugs that travel (sneezing/coughing); meningitis, h flu (causes epiglottitis)... **PRIVATE ROOM IS PREFERRED, MASK, GLOVES, HAND WASHING, PATIENT WEARING MASK - WHEN LEAVING ROOM, DISPOSABLE SUPPLIES..**

**AIRBORNE**: measles, mumps, rubella, TB & varicella chickenpox.. **PRIVATE ROOM REQUIRED, MASK, GLOVES, HAND WASHING, SPECIAL FILTER MASK (only for TB), PATIENT WEARING MASK - IF LEAVING ROOM, NEGATIVE AIR FLOW..**

TB: (transmitted through droplet though)..  
PPE: Order to put on/take off...

**TAKE OFF: in ABC order... gloves, goggles, gown, mask!**

**PUT ON: reverse ABC for the G's, but mask comes 2nd.. gown, mask, goggles, gloves!**

## **MATH**

IV DRIP RATES...  $\text{volume} \times \text{drop factor} / \text{time in minutes (volume/hours)}$

micro drips: 60 drop/ml

macro drips: 10 drops /ml

PEDIATRIC DOSE

child's weight... 2.2 lbs/kg...

IV REPLACEMENT...

Always **ROUND at the END!!!** (NCLEX will tell you to where)

4.

### **CRUTCHES, CANES, WALKERS**

Locomotion (human functioning): cast, traction, canes, crutches, walkers...

**CRUTCHES:** how do you measure? (for risk reduction; nerve damage)...

Length of crutch: 2-3 finger widths below the anterior axillary fold to a point lateral to and slightly in front of the foot.. Hand grip: when properly set, the elbow flexion will be about 30 degrees..

-How to teach how to use the different type of crutch GATES: 2 point, 3 point, 4 point & swing through...

2 point: 1 crutch/opposite foot.. other crutch/other foot..

3 point: moving 2 crutches & the bad leg...

4 point: move everything separately...

Swing through: NON-weight bearing.. \*amputations\* plant the crutches & swing through...

WHEN DO THEY USE THESE...?? *Even for even; odd for odd* = use the even # of gates when the weakness is evenly distributed... Use 2 point (mild), 4 point (severe).. use odd # gate (3), when 1 leg is odd.. can't bear weight/amputation = swing through!

early stages of RA: 2

left above knee amputee: swing through

1st day post op R knee replacement; partial weight bearing allowed: 3

advanced stages: 4

left hip replacement; 2nd day post op non weight bearing: swing through

bilateral knee replacement: 4

bilateral total knee; 3 weeks post op: 2

Going up and down **stairs with crutches:** UP with the GOOD, DOWN with the BAD!

**CANES:** Hold the cane on the **strong** side...

**WALKERS:** *Pick them up, set them down...* If they must tie belongings to the walker; have them *tie it to the side* & not the front (can tip over); **no wheels/tennis balls** (per boards!)

### **DELUSIONS, HALLUCINATIONS & ILLUSIONS:** \*PSYCH\*

*Is my patient NON-psychotic vs. psychotic? (1st thing you must decide)*

**NON psychotic** (neurotic): **has insight and reality based**; they know they have a problem... they need "good general therapeutic communication"; *that must be very difficult, how are you feeling, what do you mean by, can you tell me more?*

**psychotic:** **has NO insight & is not reality-based**; they don't have a problem/they aren't sick; they blame everyone else... "unique specific strategies"

SYMPTOMS: delusions, hallucinations & illusions...

delusion = a false fixed idea or belief; there is no sensory component.

3 types: **paranoid**, **grandiose** (you're christ) & **somatic** (x-ray vision)

hallucination = false fixed sensory (hear, feel, taste, smell, see)

**most common** hallucination = **auditory**.. then visual... then tactile (feeling), gustatory (taste).. olfactory (smell)

most common auditory = voices telling you to harm yourself.

**illusion** = misinterpretation of reality.. (sensory) \*there is a referent in reality\* (something to which a person refers)

HOW DO YOU DEAL WITH THESE PATIENTS?!?

If, psychotic - what is their problem? (What kind of psychosis do they have?)

A **FUNCTIONAL** psychosis: they can function in every day life (**schizophrenia**, **schizoaffective disorder**, **major depression**, **manic**)

**DEMENTIA**: the brain is damaged (senile, alzheimers, organic brain syndrome)

**DELIRIUM**:

**FUNCTIONAL**: this person has the potential to learn reality/improve.. Teach reality... Use 4 step process.. acknowledge feeling, present reality, set a limit, enforce the limit..

Example (answer): **FEELING**: I see you're angry, you seem upset, tell me more of how you're feeling... **REALITY**: I know that the voices are real to you, but they are not real... I'm a nurse, this is a hospital... **SET LIMIT**: That topic is off limits in our conversation.. We aren't going to talk about that.. **ENFORCE LIMIT**: I see you are too ill to stay reality based, so our conversation is over (it ends the conversation).

**DEMENTIA**: this person can **NOT** learn reality... 2 steps: acknowledge feeling & redirect them (channel them from something they can't do to something they can do)... **REALITY ORIENTATION**: person, place & time (always appropriate)... but **DON'T** present reality...

**DELIRIUM**: this is a **temporary sudden dramatic secondary loss of reality**... usually due to some kind of chemical imbalance in the body.. (\***crazy for the short term**; ex: A.T. on Feb. 3rd □\*, UTI, post-anesthesia, thyroid storm, adrenal crisis, delirium tremens)... **REMOVE** the underlying cause = 2 steps: **acknowledge the feeling & then reassure** (this is temporary and you will be kept safe).

**LOOSELY ASSOCIATED** = YOUR THOUGHTS ARE **ALL OVER THE PLACE**...

*Flight of ideas: go from thought to thought to thought...*

*Word salad: babble random words (sicker)*

*Neologism: making up words*

Narrowed self concept: when a (functional) **psychotic** refuses to leave their room or change their clothes... **NURSE** would say: "I see you feel uncomfortable.. You do not have to change your clothes or leave the room until you feel comfortable or are ready."

Ideas of reference: when you think everyone is talking about you...

5.

**DIABETES INSIPIDUS**: polyuria & polydipsia leading to dehydration, due to low ADH.

**SIADH**: oliguria (low urine output) and retaining water (gains weight)

**DIABETES (mellitus)**

Diabetes = error of glucose metabolism.  
polyuria, polydipsia

*the less the urine out; the higher the specific gravity...  
the more the urine out; the lower the specific gravity...*

Type 1: insulin dependent, ketosis prone...

Type 2: non-insulin dependent, non-ketosis prone...

polyuria (increased urine), polydipsia (increased thirst), polyphagia (increased eating)

### TREATMENT

Type 1: *DIE... diet, insulin, exercise*

Type 2: *DOA... diet, oral hypoglycemic, activity*

### DIET, INSULIN & EXERCISE

Type 2: calorie restriction, 6 small meals...

What does insulin do to the blood glucose? LOWERS it!

### **HYPOGLYCEMIA = PEAK...**

4 types...

**Regular (R):** *onset: 1 hr.. peak: 2 hrs.. duration: 4 hrs. clear solution (can be IV drip) \*rapid short acting\* RAPID & RUN*

**Lantus (Glargine):** *onset: 1 hr.. peak: NONE.. duration: 12-24 hrs. \*LITTLE to NO RISK for HYPOGLYCEMIA\* (can SAFELY give at BEDTIME) \*LONG acting\**

**NPH:** *\*intermediate acting\* onset: 6 hrs.. peak: 8-10 hrs.. duration: 12 hrs. cloudy.. suspension \*NEVER put anything in an IV bag!\* NOT so fast & NOT in the bag*

**Humalog (Lispro):** *onset: 15 mins.. peak: 30 mins.. duration: 3 hrs. \*give it WITH MEALS!\**

**ALWAYS check expiration dates!!** (manufacturer's expiration date is only good when the bottle is closed... after it's open; it expires in 30 days!) \*make sure you write the date on the bottle with EXP!\*

You should teach patients to refrigerate their insulin at home, but it doesn't need to be refrigerated in the hospital.

...EXERCISE (like another shot of insulin)

ex: "and he exercised..." aka "and he got another shot of insulin" ..... "she's going to play soccer this afternoon".. "she's going to get a shot of insulin this afternoon!"

more exercise (more insulin) = really need less insulin

less exercise = need more insulin

*SICK days: glucose is going to go up.. **still take insulin, even if they're not eating.. take sips of water; they get dehydrated fast.. (HYPERGLYCEMIA & DEHYDRATION).. needs to stay active as possible.***

### COMPLICATIONS of diabetes (mellitus)

#### **Acute**

-low blood glucose (type 1/type 2) HYPOGLYCEMIA.. not enough food, **too much insulin/meds**, too much exercise.. danger = brain damage (permanent).. S/S: **drunk in shock** = staggerin' gait, slurred speech, impaired judgement, delayed reaction time, labile (emotions all over the place), loud/obnoxious.. (vasomotor) low BP, tachycardia, tachpnea, cold, pale, clammy, mottled.. WHAT DO YOU DO?! administer rapidly metabolizable carbohydrates (sugars); any juice, candy, milk, honey, icing, jam... ideal combo = sugar plus a starch or protein.. ORANGE juice & crackers! apple juice & slice of turkey... 1/2 cup skim milk (has both sugars & protein). if UNCONSCIOUS, give GLUCAGON; IM injection.. DEXTROSE D10/D50; given IV..

-**DKA** (diabetic ketoacidosis/diabetic coma) \*only type 1's\*... glucose goes HIGH.. too much food, not enough medication, not enough exercise.. **#1 cause = acute viral upper respiratory infections (in the last 2 weeks)..**

*So, when they come into the hospital & their BS is **850***

*\***ALWAYS** ask the parents "have they had a **viral infection in the last 2 weeks!!!**"\**

S/S: DKA = *dehydration, ketones in their blood/kussmaul breathing (deep & rapid)/K (high) potassium, acidosis (metabolic)/acetone breath/anorexia due to nausea...* WHAT DO YOU DO!?! **HYDRATE!!** (IV fluids; fast!! 200ml/hour; regular insulin; normal saline/D5?) D5 doesn't stay in veins; goes into the tissues.. won't cause HYPERGLYCEMIA (D10 & D50 will!)

hyperglycemic hyperosmolar nonketotic coma **HHNK** (type 2) = DEHYDRATION... HYDRATE them!!!!

**insulin is most essential in treating DKA!!!** higher mortality rate = HHNK, however DKA has higher priority.

**\*\*long term complications of diabetes are related to: **poor tissue perfusion & peripheral neuropathy**...**

\*lab test: A1c (average glucose rate over 3 months)...

you want it to be 6 & <!!

7 = need to check on it

8 & > = out of control

6.

### DRUG TOXICITIES (5)

**Lithium:** ANTImania drug for BiPolar..

Therapeutic level: 0.6-1.2

Toxic level: 2 & >

**Lanoxin (Digoxin):** A-Fib & CHF

Therapeutic level: 1-2... 2 can be toxic!

Toxic level: 2 & >

**Aminophylline:** Airway Anti-Spasmodic **\*NOT a bronchodilator\*** (when a bronchodilator doesn't work in an acute airway problem, give them aminophylline to relax the spasm; then give the bronchodilator).

Therapeutic level: 10-20... 20 can be toxic!

Toxic level: 20 & >

**Dilantin:** Used for Seizures

Therapeutic level: 10-20... 20 can be toxic!

Toxic level: 20 & >

**Bilirubin:** Waste product from the breakdown of RBCs

(only tested in NEWBORNS on the NCLEX)

Normal: 9.9 and <

Elevated level: 10-20... 20 can be toxic! 14-15 \*is when they need to be hospitalized\*

Toxic level: 20 & >

**Jaundice:** yellowing; bilirubin in the skin

**Kernicterus:** bilirubin in the brain... usually occurs when the level gets around 20..

**Opisthotonus:** a position the baby assumes when they have bilirubin on the brain;

**HYPEREXTEND..** In what position do you place an opisthotonic child? **On their side!**

### DUMPING SYNDROME vs. HIATAL HERNIA

**Hiatal hernia:** regurgitation of acid into the esophagus, because the upper part of your stomach herniates upward through the diaphragm... **\*moves in the wrong direction in the correct rate\*** (you want it to empty faster; so it doesn't reflux)

S/S: **GERD** (heartburn & indigestion) \*when lying down after eating\*

*Treatment: play around with the head of the bed (raise), play around with water content with the meal (flush faster) & you can play around with the carbohydrate content of the meal (carbs go fast)... LOW protein!!*

**Dumping syndrome:** gastric contents dump too quickly into the duodenum... **\*moves in the right direction, but at the wrong rate\*** (you want it to empty slower)

S/S: **\*DRUNK\*** (staggering gait, slurred speech, impaired judgement) & **\*SHOCK\***

(tachycardia, tachypnea, cold, clammy, pale) **DRUNK + SHOCK = HYPOGLYCEMIA**

**\*ACUTE ABDOMINAL DISTRESS\*** (cramping, pain, doubling over, borborygmi \*increased bowel sounds\*, diarrhea, bloating, distension)

*Treatment: Eat with head low & turned to the side, low fluids with meal and low carb content in the meals. HIGH protein!!*

## **ELECTROLYTES**

***Kalemias do the SAME AS the prefix, except for heart rate & urine output!!***

S/S...

### **HYPERkalemia:**

brain: irritability, restlessness, agitation...

lungs: tachypnea

heart: low heart rate

urine: oliguria

bowel: diarrhea, borborygmi

muscles: spasticity

reflexes: +3/+4

### **HYPOkalemia:**

brain: lethargy

lungs: bradypnea

heart: tachycardia

urine: polyuria

bowel: constipation

muscles: flaccidity

reflexes: 1/2

**-Cushings:** immunosuppressed (needs PRIVATE room) (aldosterone; retain sodium & water; low on potassium)

ex:

SATA: HYPERkalemia - **clonus (muscle spasm), bradycardia**

***Calcemias do the OPPOSITE AS the prefix...  
(if it skeleton or nerve, blame it on calcium!)***

S/S...

### **HYPERcalemia:**

brain: lethargy

lungs: bradypnea

heart: bradycardia

urine: oliguria

bowel: constipation

muscles: flaccidity

reflexes: 1/2

### **HYPOcalemia:**

brain: irritability, restlessness, agitation...

lungs: tachypnea

heart: tachycardia

urine: polyuria

bowel: diarrhea

muscles: spasms

reflexes: +3/+4

**Chvostek sign:** when you touch their **CHEEK**, they go into a spasm of the face (neuromuscular irritability associated with a LOW calcium)

**Trousseau sign:** when you put a blood pressure cuff on, blow it up & they go into a **spasm of the hand**.

***Magnesiums do the OPPOSITE AS the prefix...  
(in a tie, DON'T pick magnesium!)***

S/S...

**HYPERmagnesium:**

brain: lethargy

lungs: bradypnea

heart: bradycardia

urine: oliguria

bowel: constipation

muscles: flaccidity

reflexes: 1/2

**HYPOMagnesium:**

brain: irritability, restlessness, agitation...

lungs: tachypnea

heart: tachycardia

urine: polyuria

bowel: diarrhea

muscles: spasms

reflexes: +3/+4

## ***Sodiums***

S/S...

**HYPERnatremia: DEHYDRATION \*DKA\* DI... HHNK?**

**HYPOnatremia: OVERLOAD \*Fluid volume excess\* SIADH**

**NUMBNESS & TINGLING (*paresthesia*) = earliest sign of any electrolyte disorder**

**“circumoral” = numb & tingling lips**

**UNIVERSAL sign of any electrolyte disorder = MUSCLE weakness (*paresis*)**

**TREATMENT:** (boards should only test potassium)

**HIGH potassium (*will stop your heart*)**

Rules for Potassium:

**-NEVER push IV!**

**-NEVER more than 40 of K per liter of IV fluid.. If more than 40, question & clarify with DOC first!**

**-HIGH POTASSIUM = worst electrolyte imbalance! \*can STOP heart!\***

So, how do we lower potassium?!?! **Give D5W with REGULAR insulin** (drive potassium into the cell & out of the blood) \*temporary/fast\*!!! “enters early”

-Kayexalate “**K exits late**” (switch the potassium with sodium) \*permanent/slow\*  
So... **\*Give both D5W w/ REG insulin & kayexalate!\***... \*switching from a life threatening imbalance (HYPERkalemia) for a non-life threatening imbalance (HYPERnatremia); just hydrate!!\* ☺

7.

60 drops/ml \*remember!!\*

## **ENDOCRINE Overview**

**HYPER**thyroidism: “thyroidsism” = “metabolism”, because that is what the thyroid does, so **HYPER**thyroidism = HYPERmetabolism

S/S: weightloss, high pulse & BP, irritable, heat intolerance, cold tolerance, exophthalmos (bulging eyes).. **GRAVES** disease (running yourself into the grave)

Treatments:

-**radioactive iodine**... KNOW: patient needs to be by themselves for 24 hours (restriction of visitors).. and then be really careful with their urine (**flush 3 times!**) If the urine is spilled, they must call the **hazmat team**!! Only RISK to the Nurse is the patient’s urine (how the radioactivity is excreted!)

-**PTU** (propylthiouracil): \***P**uts **T**hyroid **U**nder\* ...CANCER drug! KNOW: that it is an **IMMUNOsuppressor**; **monitor WBCs**!!

-**thyroidectomy** (most common way used!) \*TOTAL (complete) or SUBTOTAL (partial) thyroidectomy\*

-**TOTAL**: need lifelong hormone replacements.. at risk now for **HYPOcalcemia!**

-**SUBTOTAL**: do NOT need lifelong hormone replacements.. at risk now for **THYROID STORM/CRISIS**

**THYROID Storm = medical EMERGENCY**  
(can cause BRAIN damage!!!)

**\*basically frying your brain to death with HYPOXIA!\***

S/S: **super HIGH temps** (105 & >), **extremely HIGH BP’s** \*ex: 210/180 (stroke category!)\*, **severe TACHYCARDIA** (ex: 180-200) & **PSYCHOTIC DELIRIUM**

Treatment: **Get temperature DOWN & get the oxygen UP!!** \***FIRST** way to get temp down: ice packs.. **BEST** way to get temp down: cooling blanket... OXYGEN (per mask @ 10L)!!! **DO NOT USE TYLENOL** - it works in the hypothalamus and isn’t going to work at this time..

FYI: If it’s a *sequence* question: oxygen, ice packs, cooling blanket.. **NEVER, EVER** leave patient!

**Post OP RISKS:**

(1st 12 hours): priority = airway & hemorrhage.. (same for both!)

(12-48 hours): **TOTAL**: **T**etany (muscular spasms in larynx; can cut off airway) due to low calcium.. **SUBTOTAL**: Thyroid **S**TORM!

(>48 hours \*42-72\*): **INFECTION**

FYI for INFECTION: NEVER choose infection as a PRIORITY in the **first 72 hours** for anything!!! ONLY CHOOSE it **after the first 72 hours**!!!

**HYPOTHYROIDISM**: “thyroidsism” = “metabolism”, because that is what the thyroid does, so

**HYPOTHYROIDISM** = HYPOMETABOLISM

S/S: obese, cold intolerance, heat tolerance, low pulse & BP = **MYXEDEMA**

Treatment: give them thyroid hormones: synthroid (levothyroxine)

**\*CAUTION!!\*** do NOT sedate these patients; can put them in a coma

-What pre-op order would you question? **AMBIEN @ HS..**

If the patient is supposed to be NPO; make sure you question that they still get their morning pill!! (they NEED it! NEVER hold your thyroid pills unless you have EXPRESS orders to do so).

**ADRENOCORTEX Disease (start with A & C)**

ex: Cushings, Conns, Addisons..

**ADDISONS**: UNDER secretion of the adrenocortex

S/S: **HYPERpigmented** (tan!) & do NOT adapt to stress (your stress response is to raise your glucose & BP!) -these people can't do this; glucose & BP goes down = go into shock! Anything from a tooth filling at the dentist or a minor fender bender can cause these.. people to stress out & die.. **TICKING TIME BOMB!**

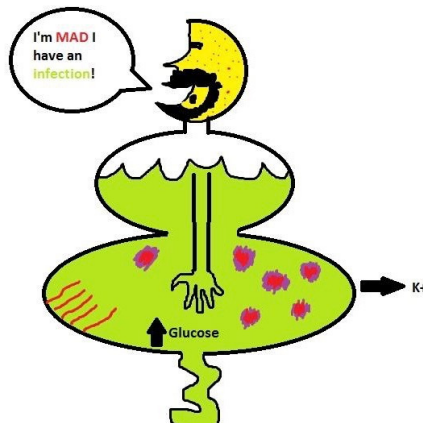
**\*ADDISONS is one of the RAREST endocrine disorders\*** ex: for every 600 CUSHINGS patients, there's 1 ADDISONS patients.. \*JFK had this dx; so when he was shot (even if it was in his shoulder & not his skull), there was never any chance for survival\*

**Treatment**: glucocorticoids (**steroids; all end in “sone”** ex: prednisone, dexamethasone & hydrocortisone.. Remember: **ADDISONS “ADD a SONE”!!**

**CUSHINGS**: OVER secretion of the adrenocortex (cushy = more!)

S/S: **puffy moon face**, **hirsutism (facial hair)**, **trunkal obesity (big body)**, **gynecomastia (female breasts on men)**, **buffalo hump**, **skinny arm & legs (muscles waste away)**, **retain sodium & water**; **losing potassium**, **striae (stretch marks)**, **bruising**, (“I’m mad; I have an infection”; grouchy/irritable & immunosuppressed) & **HIGH glucose \*most important to remember!!\*** (**hyperglycemic!!**)!!

**CUSHman** (know this picture!!)



**Treatment:** HYPERsecreting of the adrenocortex = ADRENALectomy (bilateral).. can cause Addisons though; so they need steroids; making you look like CUSHman again ☹

\*KID's **TOYS!!!**\*

3 questions to ALWAYS ask...

-Is it **SAFE**?

-Is it **AGE APPROPRIATE**?

-Is it **FEASIBLE**? (possible to do easily or conveniently)

SAFETY considerations

-**NO SMALL TOYS** for children **UNDER 4** (could put in mouth/aspirate)

-**NO METAL (die-cast) TOYS, if OXYGEN is in use..** (sparks!)

-**BEWARE of FOMITES** (NON-living object that harbors micro-organisms)

What toys are the worst for FOMITES? Stuffed animals...

What toy is the best for FOMITES? Hard plastic toys/you can disinfect it!

\*BEST toy for an IMMUNSUPPRESSED child? HARD PLASTIC action figure!

FEASIBILITY consideration

-Could they do it?

ex: Is swimming a good activity for a 13 year old?

Safe; yes.. Age appropriate; yes.. Feasible for a kid in a body cast? NO!!

AGE APPROPRIATE considerations

**Infant**

**0m-6m:** BEST toy: **musical mobile** \*stimulates motor & sensory\*...

2nd BEST toy: **something SOFT & LARGE**

**6m-9m:** \*working on **object permanance**\*: they know it's still there even though they can't see it\* ex: you put a toy under a blanket - if they don't have it; they'll cry.. if they have it: they know to lift the blanket & get it..

At this age, your "play" should be teaching them that; that is their big task at this time.

BEST toy: **cover/uncover toy**; play PEEK-a-BOO, the parent putting a blanket over their head and then taking it off, Jack-in-the-Box, etc... 2nd BEST toy: something large/hard.. **WORST** toy: **musical mobile**; they can sit up/reach up and then can strangle themselves ☹

**9m-12m:** \*working on **vocalization**\*: BEST toy: **speaking toys**; ex: "Talking" Woody (Toy Story!), Tickle Me Elmo, Teddy Ruxpin, See & Say: "the COW says MOO", etc.. They also need **PURPOSEFUL ACTIVITY**...

**NEVER PICK THESE ANSWERS if the kid is UNDER 9m: build, sort, stack, make, construct - why? PURPOSE words!!**

**Toddlers**

1-3: Best toy: **PUSH/PULL**.. ex: lawn mower, baby stroller \*work on GROSS MOTOR; running, jumping\* NO finger dexterity yet; can't color, use scissors, etc. "Finger painting", yes, because they can use their HAND! Finger painting = HAND painting.

-They do PARALLEL Play (play along-side, but not with)

### Preschoolers

Work on their **FINE MOTOR** (finger dexterity), work on **BALANCE** (tricycles, dance class, iceskates) Characterized by **CO-OPERATIVE play** (play together in groups)  
-They like to **PRETEND**; highly imaginative!

### School Age

Characterized by the **3 C's**

- Creative** (blank paper & colored pencils)
- Collective** (collect anything & everything)
- Competitive** (they don't like being the loser)

### Adolescents

Peer Group Association (hang out with their friends)

Question (pertaining to Nursing): *Do you let 5-8 adolescents hang out in a room together?*

**YES!! UNLESS** these 3 things: **if anyone is fresh post-op** (less than 12 hours out of surgery), **if anyone is immunosuppressed** & **if anyone has a contagious disease**.

### **LAMINECTOMY**

*(is surgery that creates space by removing the lamina - the back part of the vertebra that covers your spinal canal. Also known as decompression surgery, **laminectomy** enlarges your spinal canal to relieve pressure on the spinal cord or nerves).*

*lamina = vertebral spinous processes (posterior)*

*ectomy = removal*

WHY do you do this?? **RELIEVE NERVE ROOT COMPRESSION**

S/S of nerve root compression: 3 P's

-**pain**

-**paresthesia** (numbness & tingling)

-**paresis** (muscle weakness)

**MOST IMPORTANT** thing to pay attention in any **NEURO** question = **LOCATION!**

3 locations for laminectomy:

-**cervical** (neck), **thoracic** (upper back) & **lumbar** (lower back)

Questions pertaining to areas:

**cervical**; diaphragm... #1 answer = check out their **breathing**... #2 answer = check out the function of their **arms & hands**.

**thoracic**; cough & bowels... #1 answer = check **how well they cough**

**lumbar**; bladder & legs... #1 answer = **is their bladder distended or empty**... #2 answer = **how is the function of their legs**

POST op laminectomy: #1 answer = **log roll!**

3 things to mobilizing pt: do **NOT** dangle them (sit on the edge of the bed), do **NOT** sit for longer than 30 minutes & **they may walk, stand & lie down without restriction..**

POST op **COMPLICATIONS** (depends on LOCATION!!)

**cervical**: trouble breathing after surgery.. #1 **complication: PNEUMONIA**

**thoracic**: trouble with coughing.. #1 **complication: PNEUMONIA & ileus** (because bowels won't work)

**lumbar**: #1 **complication: urinary retention & problems with the legs**

**ANTERIOR THORACIC** (from front through the chest to the spine) laminectomy: will have a **CHEST TUBE (pneumothorax)!!** But no others will have a chest tube...

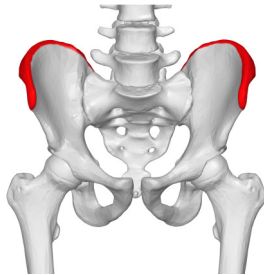
Laminectomy **with FUSION**: they take a bone graft from the iliac crest... If you remove the disc, you have to get bone from somewhere, so there isn't bone on bone (grinding)! So, there will be 2 incisions; spine & hip; the most pain will be at the hip ☹

*-Most bleeding & drainage will be at the hip; will have a JP (Jackson-Pratt) drain...*

*-HIGHEST risk for INFECTION: they are equal..*

*-HIGHEST risk for REJECTION: the spine!*

Surgeons are using bones from cadavers quite a bit to lower infection rates..



Discharge **TEACHING**:

**Permanent** restrictions =

*-NEVER pick up object by bending at the waist; lift with the knees!!*

*-cervical lams can NEVER lift anything over your head (for life!)*

*-NO mountain biking, jerky moving ride (rollercoasters), horseback riding, etc.*

**Temporary** restrictions =

*-do NOT sit longer than 30 minutes (6 weeks)*

*-lie flat & log roll (6 weeks)*

*-NO driving (6 weeks)*

*-do NOT anything more than 5 lbs; gallon of milk (6 weeks)*

Remember: MOST IMPORTANT thing to pay attention to  
in \*any\* **NEURO** question = **LOCATION!**

**8.**

### **LAB VALUES**

*-Must know and also how to PRIORITIZE them!!*

**A** = **LOW** priority

**B** = **LOW** priority, but be concerned (watch them)

**C** = **HIGH** priority; critical/do something!! \*you CAN leave the bedside\*

**D** = **HIGH** priority; extremely critical!! \*you can NOT leave the bedside\*

**creatinine** (serum): *BEST factor to determine RENAL function... 0.6-1.2*

Level **A**

\*FYI\* the only time you should contact the DOC because of a HIGH level creatinine, is if the pt is going for a test/procedure (the next morning) that involves a DYE; but it is not priority to let them know (it can wait until 6am/7am).

**INR:** monitors *coumadin therapy*... **in the 2's & 3's** (ex: 2.1... 3.8)

Level **C**; if **4 & >**!

-do something = (1) always **HOLD**, (2) **ASSESS** (focuses assessment on area), (3) **PREPARE**, (4) **CALL** doc/respiratory/etc.

ex: (click & drag)... level of **4.7** =

HOLD coumadin, ASSESS for bleeding, PREPARE to give vitamin K, CALL doc!

-sometimes there's nothing to HOLD, so jump to ASSESS.. sometimes there's nothing to PREPARE, so jump to CALL - but you should always go through the process in your mind, so you don't miss a step.

**potassium:** (an indicator that something is wrong) **3.5-5.3**

Level **C**; if **LOW**

ASSESS heart, PREPARE to administer potassium, CALL doc.

Level **C**; if **HIGH \*5.4-5.9\***

**HOLD** all potassium, **ASSESS** the heart, **PREPARE** (kayexalate, D5W & regular insulin) & **CALL** doc.

Remember: if the potassium is = or > **than 6**; it's a level **D**; **deadly** serious; pt could DIE, in like the next **2 minutes**.. :(

*HOLD all potassium, ASSESS the heart, PREPARE (kayexalate, D5W & regular insulin) & CALL doc \*\*\*STAT!!! get everyone involved & YOU stay with your PT\*\*\**

**pH:** **7.35-7.45**

pH in the 6's (ex: 6.8) is a level **D**

**ASSESS the VITALS** & **CALL** doc & get them there **STAT!!**

**BUN** (blood urea nitrogen): *\*nitrogen waste products in the blood\** **8-25**

**If, HIGH, no BIG deal - ASSESS pt for DEHYDRATION**

*\*FYI\** If they give you an elevated blood value & you have NO clue what's going on; & they ask for what would you assess them; **DEHYDRATION** is a good answer.

**hemoglobin:** **12-18**

**8-11** is a level **B**; **ASSESS** for anemia (bleeding or malnutrition)

-If < **8**, it's a level **C**, do something! **ASSESS** for bleeding, **PREPARE** to administer BLOOD & **CALL** doc.

**bi-carb:** **22-26**

HCO<sub>3</sub> (*chemical buffer that keeps the pH of blood from becoming too acidic or too basic*)...

**Abnormal** bi-carb is a level **A**; **don't worry!**

**CO<sub>2</sub>**: (carbon dioxide; getting from an arterial blood gas) **35-45**

A CO<sub>2</sub> that is **HIGH** (like in the 50's); level **C**

*\*Talking about people WITHOUT COPD!!\**

**ASSESS** respirations, **PREPARE**/HAVE pt do PLB!

**Pursed lip breathing** (PLB) is the **breathing** technique that consists of exhaling through tightly pressed (**pursed lips**) and inhaling through nose with mouth closed.... *This should FIX problem; so you shouldn't have to CALL doc.*

A CO<sub>2</sub> that is **HIGH** (like in the 60's); level **D** (respiratory FAILURE)

**ASSESS** respiratory status, **PREPARE** for INTUBATION/VENTILATE, **CALL respiratory therapy first, then CALL the doc.** (**YOU stay with YOUR pt!!!**)

**hematocrit: 36-54** (3x the hemoglobin; 12-18!)  
elevated hematocrit; abnormal, level **B**  
**ASSESS** for DEHYDRATION

**pO<sub>2</sub> (from arterial blood gas; not pulse ox!): 78-100**  
if it is **LOW**, but still in the 70's (ex: 70-77), level **C**!  
**ASSESS** for respiratory status; give them **OXYGEN**!! (you CAN do this WITHOUT an order)

FYI: when a pt is HYPOXIC: which rate increases first? respiratory rate or **heart rate**?  
FYI: if you ever work CORONARY care, what are the 2 most common causes of episodic tachycardia in heart pt's? **HYPOXIA & DEHYDRATION**

if it is **LOW** in the 60's (ex: 63-69), level **D**!  
\*\*\*When the O<sub>2</sub> & the CO<sub>2</sub> are both in the 60's; this is when you need to  
INTUBATE/VENTILATE... **CALL** respiratory therapy first, then **CALL** the doc. (**YOU stay with YOUR pt!!!**)

ex: (click & drag question):  
**THROW on O<sub>2</sub>, ASSESS, PREPARE to intubate/ventilate & then call respiratory/doc..**

**80% of the time, you always assess before you do anything..**  
-An example where this is not true, if if you had a blood tranfusion going on and the patient was complaining of itching... You would STOP the infusion & then assess the pt!

**ASSESS before you DO, UNLESS delaying  
DOING puts your pt at higher risk!**

BEST vs. FIRST question...  
**BEST: administer O<sub>2</sub>**  
**FIRST: raise head of bed**

**O<sub>2</sub> Sats: 93-100**  
Anything < **than 93** is a level **C (for NCLEX!!)** In **real life**, be **HAPPY** with **88 & >!!**)...  
**ASSESS** pt & throw on O<sub>2</sub>!

For **PEDIATRICS**; **FREAK out** if the kid goes **BELOW 95!!!**  
FYI: What invalidates for SAO<sub>2</sub>? **ANEMIA** falsely elevates it...

**BNP** (brain natriuretic peptide; BEST indicator for CHF): **should be UNDER 100**  
elevated BNP; level **B**

**sodium: 135-145**  
abnormal: level **B** = **ASSESS**!  
**HIGH** = ASSESS for **dehydration**  
**LOW** = ASSESS for **overload**

\*If the question says that the level is abnormal & there is a **change in the LOC**, the priority of the pt goes to a level **C** (safety issue)

## **WBC:**

**total WBC: 5,000-11,000**

**ANC (absolute neutrophil count): NEEDS to be ABOVE 500**

**CD4 count: NEEDS to be ABOVE 200** \*when below 200, this is when HIV goes into AIDS\*

:(

**ALL** of these, if **BELOW** the normal count, will be a level **C!**

**ASSESS** for signs of infection & place *them* on **NEUTROPENIC precautions!**

## **platelets:**

TRIGGER levels for **thrombocytopenic** or **bleeding PRECAUTIONS...**

platelet count **BELOW 90,000** is a level **C...**

platelet count **BELOW 40,000** is a level **D...**

## **RBC: 4-6 million**

abnormal count is a level **B**

**MEMORIZE the 5 D's!!! (the 5 you really NEED to KNOW!!)**

**pH & potassium in the 6's**

**Co2 & O2 in the 60's**

**platelet count LESS than 40,000...** These are the **HIGHEST** priority pt's!!

**LEARN** all the C's & what to do!!! (about 8-10)...

**9.**

## **PSYCH DRUGS**

KNOW **generic** names!!

**warfarin = coumadin**

**acetaminophen = tylenol**

**acetylsalicylic acid = aspirin**

**meperidine = demerol**

**ALL psych drugs cause LOW BP & WEIGHT CHANGES** (usually GAINing)

...However, some other meds (ex: Prozac) can cause weight LOSS!

**phenothiazines** (1st generation/typical ANTipsychotics)

-they all end in "**zine**"

actions? they don't cure psych diseases; they just reduces symptoms

...in **LARGE** doses, they are ANTipsychotics

"we use ZINES for the ZANIEs"

...in **SMALL** doses, they are ANTiemetics

...they are considered **major TRANQUILIZERS \*BIG GUNS!!\***

**\*aminoglycosides are to antibiotics,**

**like phenothiazines are to tranquilizers\* = they're both the BIG GUNS!**

S/S:

**A = anticholinergic (dry mouth) \*Nursing dx: risk for injury\***

**B = blurred vision \*Nursing dx: risk for injury\***

**C = constipation**

**D = drowsiness**

*E = EPS (extrapyramidal symptoms); like Parkinsons \*Nursing dx: risk for injury\**

*F = Fotosensitivity (photosensitivity)*

*aG = agranulocytosis (LOW white count; immunosuppressed)*

**TOXIC side effect: HOLD & CALL doc!!!**

**decanoate or D** (written after a medication name; ex: thorazine D) = it is **LONG acting**; sometimes it works for 2 weeks; sometimes it works for a month... Given **IM** form to noncompliant pt's; usually court ordered.

**tricyclic antidepressants** (old class; grandfathered into the NSSRI class)

MOOD elevators...

examples: **elavil**, **tofranil**, **aventy**, **desyrel**

S/S:

*A = anticholinergic (dry mouth)*

*B = blurred vision*

*C = constipation*

*D = drowsiness*

*E = euphoria*

\*The pt must take these for **2-4 weeks before they see beneficial effects!**\*

### **benzodiazepines**

ANTI anxiety meds... considered to be **minor TRANQUILIZERS**

-they always have "**zep**" in the name

\***diazepam** (valium), **lorazepam**...

indications: they are MORE than just minor tranquilizers

-can be used as a **pre-op to induce anesthesia**

-can be used as a **muscle relaxant**

-can be used for **alcohol withdrawal**

-can be used to help with **seizures**

-can be used to help a **pt fight a ventilator (relaxes them)**

-they work **quickly**, but you **must not take them longer than 2-4 weeks**.

**"heparin is to coumadin as a tranquilizer is to an antidepressant"**

S/S:

*A = anticholinergic (dry mouth)*

*B = blurred vision*

*C = constipation*

*D = drowsiness*

### **MAOI's** (monoamine oxidase inhibitors)

antidepressants

-NOT really given anymore; except with the VETERAN hospitals (they are super cheap; they cost only pennies)

**marplan**, **nardil** & **parlate** (NOT the generic name)

S/S:

*A = anticholinergic (dry mouth)*

*B = blurred vision*

*C = constipation*

*D = drowsiness*

**#1 thing that NCLEX tests: PT teaching!!**

-to PREVENT severe acute, sometimes fatal HYPERTensive crisis: the pt must avoid all **TYRAMINES**...

They ***ARE ALLOWED ALL fruits & veggies***, except **NO** salad **BAR!!\***

**BAR = bananas, avocados & raisins (raisins stands for any DRIED fruit)**

Grains are fine; cookies, bread, pies :)

**NO ORGAN meats**; liver, kidney, tripe (sheep's stomach), etc.

**NO PRESERVED meats** \*smoked, dried, cured, pickled\*

**NO hot dogs** or certain processed **lunch meats**; they contain "other assorted parts"

DAIRY: **NO cheeses** except **cottage cheese & mozzarella!**

**NO ALCOHOL** or **CHOCOLATE**

-Teach the pt's NOT to take over-the-counter meds when they are on a MAOI

### **lithium**

-used to treat Bipolar disorder (decreases **MANIA**)

-stabilizes nerve cell membranes

S/S: 3 P's

**PEEing**

**POOPing**

**Paresthesia** (numbness & tingling) because the early sign of ALL electrolyte imbalances... YOU can still GIVE lithium with these S/S; just tell the DOC when they come in.

-lithium **TOXIC** effects: **tremors, metallic taste & severe diarrhea... HOLD dose & CALL doc!!**

**#1 intervention: is to increase fluids!**

-watch **SODIUM** levels!!

-if pt is sweating/manic - do NOT give them water; give Gatorade/POWERADE!

-lithium is closely linked to **SODIUM**; **LOW sodium** makes lithium **MORE TOXIC... HIGH sodium** will make lithium **ineffective**.

-for lithium to work, the **SODIUM level must be normal**.

### **prozac** (SSRI)

-similar to elavil (NSSRI)

S/S:

**A = anticholinergic (dry mouth)**

**B = blurred vision**

**C = constipation**

**D = drowsiness**

**E = euphoria**

-prozac causes **INSOMNIA** (give it before NOON; don't give at BEDTIME)

-when **changing the DOSE** in adolescents/young adults; watch for **increased suicidal risk!**

### **haldol**

**\*the ONLY MAJOR antipsychotic tranquilizer that CAN be given to pregnant women!\***

-like **phenothiazines** (1st generation/typical ANTipsychotics)

-has a "decanoate" form; LONG acting IM

-basically the same as thiorazine

S/S:

**A = anticholinergic (dry mouth) \*Nursing dx: risk for injury\***

**B = blurred vision \*Nursing dx: risk for injury\***

*C = constipation*

*D = drowsiness*

*E = EPS (extrapyramidal symptoms); like Parkinsons \*Nursing dx: risk for injury\**

*F = Fotosensitivity (photosensitivity)*

*aG = agranulocytosis (LOW white count; immunosuppressed)*

**NMS \*KNOW!!\***

**(neuroleptic malignant syndrome)** is a life-threatening neurological disorder most often caused by an adverse reaction to neuroleptic or antipsychotic drugs... **Causes extremely HIGH fevers (pyrexia): 106-108 degrees F.**

**-Make sure that the dose for an ELDERLY pt is HALF the adult dose!!!**

Note: NMS can also cause anxiety & tremors; just like EPS (like Parkinsons)

**NCLEX will test to see if you know the difference..**

**EPS = side effect (NO big deal)**

**NMS = medical EMERGENCY; pt could die (HUGE big deal!)**

**TAKE a TEMPERATURE! \*FEVER!!\***

**-if 102 & above, call RAPID RESPONSE!**

**-safety CONCERNS related to the side effects...**

**clozapine** (clozaril)

**NEW class for ZANIEs**

**-used to treat SEVERE schizophrenia**

**-meant to replace the ZINEs & haldol**

**-has an advantage; does NOT have the S/S A, B, C, D, E or F...**

**-DOES have the S/S aG (agranulocytosis; low WHITE count) \*trashes BONE marrow!\***... However, aG doesn't always happen with everyone; so some people can take this drug & some people can't... Remember: with any of your **ATYPICAL ANTIpsychotics**, **WHITE count is a BIG DEAL.**

**Geodon** (Ziprasidone) has a **BLACK BOX WARNING** (FATAL drug situation); it prolongs the QT interval & can cause sudden CARDIAC arrest ☹ \*do NOT use with heart problem pt's\*

tranquilizer class ends in "z"

1st generation/typical (major) ANTIpsychotics... end in **-zine**

2nd generation/atypical (major) ANTIpsychotic... end in **-zapine**

(minor) tranquilizers... end in **-zep**

**zoloft** (Sertraline) \*SSRI\*

**-causes INSOMNIA, but you can give it at bedtime**

**BIG THING that NCLEX is testing: the interactions...**

**\*cytochrome p450 system (in the liver) responsible for breaking down and deactivating the drugs... zoloft usually interferes with this system! -when you take other drugs, it increases TOXICITY, because they aren't broken down.**

**...So, if you have a patient on zoloft & other drugs, then the other drug doses need to be lowered.**

**-watch for interactions with ST. JOHN'S WART** (can get serotonin syndrome; SADH: sweat, apprehensive (impending sense of doom!!), dizzy & headache)

**-if taking warfarin with zoloft; you will bleed out (reduce warfarin; watch for increased bleeding; warfarin will go toxic!)**

10.

## Labor & Delivery

### **Stage #1**

#### FETAL Monitoring Patterns

##### **BAD** ☹

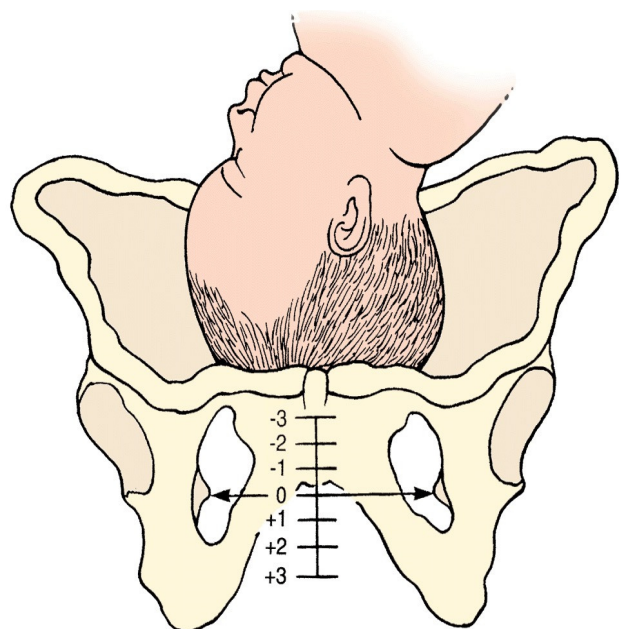
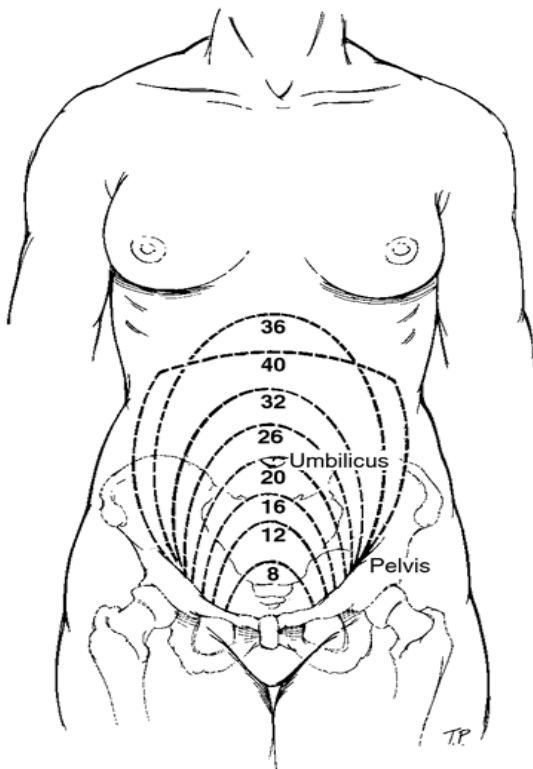
- LOW fetal heartrate (under 110)...** Tx: **LION** (**LEFT side, IV, O2, notify!**)
- LOW baseline variability** (when fetal heartrate stays the same & does not change)... Tx: **LION** (**LEFT side, IV, O2, notify!**)
- LATE decelerations** (heartrate slows down near the end or after a contraction)... Tx: **LION** (**LEFT side, IV, O2, notify!**)
- VARIABLE** (very **BAD**) **decelerations** (prolapsed cord)... Tx: **push/position**

##### **OKAY** ☺

- HIGH fetal heartrate (over 160)**... NO big deal/document/take Mom's temp (may have fever)
- HIGH baseline variability** (when fetal heartrate is always changing)... Good/document!
- Early decelerations** (baby's heart SLOWS before or at the beginning of a contraction)... Fine/document!

**Variable**.....**Cord Compression**  
**Early Deceleration**.....**Head Compression**  
**Acceleration (HIGH fetal heartrate)**.....**Okay**  
**Late Deceleration**.....**Placental Insufficieny**

**ALWAYS check FETAL heartrate!!**



## Stage #2

Delivery of the BABY!!!

### Order

- deliver the **HEAD**
- suction the mouth then the nose..
- check for a nuchal cord (around the neck)
- deliver the shoulders & the body
- the baby **MUST** have an ID band on before it leaves the delivery area

## Stage #3

Delivery of the PLACENTA

- make sure it is **INTACT**
- make sure the cord has 3 vessels (**AVA**; 2 arteries & 1 vein)

## Stage #4

Recovery

(4 things you do, 4 times per hour in the 4th stage!)

- VITAL signs \*check for signs of **SHOCK!** (**pressures go DOWN, rates go UP, pale, cold & clammy**)
- check the **FUNDUS**; if it's boggy, massage it.. if it's displaced, you catheterize!
- check the **PADS**; if bleeding excessively; she will **SATURATE** a pad 15 mins or less.
- ROLL her over** (check for bleeding underneath her)

**Postpartum** (ASSESSMENT; every 4-8 hours)

**B:** breasts

**U:** *uterine fundus*; needs to be **FIRM**; if boggy, massage! needs to be *midline*; if not, cath them... height to fundus related to the belly button: *fundal height = days postpartum*.. 4th postpartum day: 4 below on the 4th day..

**B:** bladder

**B:** bowel

**L:** *lochia*; rubra (1st; red), serosa (2nd; pink) & alba (3rd; white)... amount: 4"-6" on a pad/hours = okay... **SATURATE** a pad 15 mins or less = bad.

**E:** episiotomy

**H:** hemoglobin & hematocrit

**E:** *extremity check*; looking for *thrombophlebitis*; bilateral calf circumference measurements

**A:** affect

**D:** discomfort

Variations in the NEWBORN

**caput succedaneum**: *crosses sutures (symmetrical)*

-Refers to the **swelling, or edema, of a newborn's scalp soon after delivery**. It appears as a lump or a bump on their head. This condition is caused by prolonged pressure from the dilated cervix or vaginal walls during delivery.

**cephalohematoma**: is a **traumatic subperiosteal haematoma that occurs underneath the skin, in the periosteum of the infant's skull bone**.

## **OB Meds**

**terbutaline**... tocolytic (*stops labor*); causes *maternal tachycardia*

**magnesium sulfate**... tocolytic (*stops labor*); *HYPERmagnesemia*;  
***LOWERS*** heart rate, BP, ***reflexes, respiratory rate*** & LOC!

Parameters for titrating mag sulfate: respirations **ABOVE 12**; it's okay... if **BELOW 12**; slow the mag down! reflexes: we **WANT +2**.. if it's +1; slow it down.. +3; speed it up.

**oxitocic**... stimulate & strengthen labor!

oxytocin \*pitocin\* (*BIG thing to remember; it can cause **uterine hyperstimulation** - longer than 90 seconds & closer than every 2 minutes; if you see this, back off your PICC!*)

**methergine**... ***causes HIGH BP***

## **FETAL LUNG MATURING Meds**

**betamethasone**... \*steroid\*

-given to the ***mother***

-it's given ***IM***

-it is given ***BEFORE*** the baby is born

**survanta** \****surfactant***\*

-it is given to the ***baby***

-it is given ***trans-tracheal*** (blown in through the trachea; nebulizer)

-it is given ***AFTER*** the baby is born

## **Medication HELPS & HINTS**

**humulin 70/30**: an insulin that combines the *short action* of regular human insulin (***Humulin R***) and the *intermediate action* of ***Humulin N***.

***N = 70% & R = 30%***

**Drawing up insulin**: CLEAR before CLOUDY... "***RN***"; what we all want to be!!! ☺

***clear = R, cloudy = N***

**Pressurizing the vial**: inject air into the ***N*** (first) then into the ***R*** (second)... then draw up the ***R***.. then draw up the ***N***!

**Injections**:

...When choosing sizes: ***the clue is in the abbreviation***! Look at the first letter & then go find those #'s!!

***IM*** = 21g & 1" (I looks like 1)

***SUBQ*** = 25g & 5/8" (S looks like a 5!)

**heparin**

-given IV or subQ

-works immediately

-can NOT be given for longer than 3 weeks (except for lovenox)

-antidote = protamine sulfate

- lab test that monitors: **PTT** (heparin = 7 letters; count on hand; 3 fingers left)
- CAN** be given to pregnant women

### **coumadin**

- given only PO
- takes a few days to a week to work
- can be given for the rest of your life
- antidote = vitamin K
- lab test that monitors: **PT** (INR) (coumadin = 8 letters; count on hand; 2 fingers left)
- can **NOT** be given to pregnant women

### **K wasting / K sparing diuretics**

**any drug ending in X; x's out K (waste) + diurel**  
**...all others spare!**

### **baclofen & flexeril**

muscle relaxant

S/S: **fatigue/drowsiness & muscle weakness**

Teach: **DON'T** drink, drive or operate heavy machinery

## **PEDIATRIC Teaching**

### **Piaget's Theory of Cognitive Development** (4 stages for children's thinking)

**1st: 0-2 (sensory motor);** totally present oriented \*teach while you do it\*

**2nd: 3-6 (pre-operational);** fantasy oriented/imaginative \*teach the morning/day of; they learn through play\*

**3rd: 7-11 (concrete operations);** rule oriented \*teach them days ahead; teach them what you are going to do & the **skills** by age appropriate reading & demonstration\*

**4th: 12-15 (formal operations);** can abstract & can think cause/effect \*teach them like an adult\* **can manage!!**

FYI: What is the first age that a child can manage their own care? **12.**

### **HOW to take PSYCH Tests!! (7 principles)**

-make sure you know **which phase of the relationship** you are in

-gift giving (**don't give/accept in psych!**)

-**don't give advice**

(if pt asks "what should I do?" say, "what do you think you should do?")

-**don't give guarantees**

-**if the pt says something;** the best answer is the one **that keeps them talking**

-**concreteness; don't use slang** (psych pt's take you literal) \*don't say "chill out"; you may find them in the refrigerator!

-**empathy** (the nurse accepts the pt's feelings as being valid, real & worthy of action!)

**ALWAYS be empathetic!!**

**-BAD answers for empathy:** “don’t worry, don’t feel, you shouldn’t feel, I would feel, anybody would feel, most people feel”... **DON’T SAY THESE!!**

#### **4 Step Process for Answering EMPATHY Questions**

**-recognize that it’s an empathy question** (always have a quote in the question & each answer is a quote)

**-put yourself in the pt’s shoes!**

**-ask yourself** \*if I said those words and really meant them; how would I be feeling?\*

**-choose the answer that reflects that feeling or anything close!**

-do **NOT** choose the answer that reflects their words!

**\*empathy ignores what is said and goes with what is felt\***

11.

### **PRIORITIZATION/DELEGATION & STAFF MANAGEMENT**

#### **prioritization**

-choose which pt is sickest or healthiest!

4 things in each answer: **age, gender, diagnosis & modifying phrase**

**-2 will be totally irrelevant: age & gender!!!**

determine with: **diagnosis & modifying phrase; modifying phrase is most important!!!**

ex:

**angina vs. MI - who is HIGHER priority?? MI!**

**BUT...**

angina with **unstable BP...**

**dx: angina; modifying phrase: unstable BP = HIGHER priority!!**

**MI with stable vitals...**

**dx: MI; modifying phrase: stable vitals**

**ALWAY pay attention to the MODIFYING PRIORITY!!!**

-Do **NOT** use **ABC’s...**

4 rules for **PRIORITIZATION**

1. **acute beats chronic**

ex: COPD (chronic), CHF (chronic) & **appendicitis (acute: HIGHEST priority!)**

if you used ABC’s, you’d choose COPD & you’d be wrong!

2. **fresh post op (12 hours) beats medical or other surgical**

ex: COPD, CHF, acute appendicitis, **2 hour post cholecystectomy (fresh post op: HIGHEST priority!)**, 2nd day post of coronary artery bypass graft?

3. **unstable beats stable** (duh!) \*talking **right now**; do NOT think otherwise!\*

words (in the answer) that make a pt **unstable**:

- unstable
- acute illness
- post op **less** than 12 hours
- general anesthesia (only in the first 12 hours)
- lab abnormalities of an **C** or **D** level
- “not ready for discharge”, “newly admitted”, “newly diagnosed”, “admitted **less** than 24 hours ago”
- changing or changed assessments (something new/different)
- experiencing **unexpected** sign & symptoms of the disease with which they were diagnosed

words (in the answer) that make a pt **stable**:

- stable
- chronic illness
- post op **greater** than 12 hours
- local or regional anesthesia
- lab abnormalities of an **A** or **B** level
- “ready for discharge”, “to be discharged”, “admitted **longer** than 24 hours ago”
- unchanged assessments (nothing new/different)
- experiencing the **typical expected** sign & symptoms of the disease with which they were diagnosed

ex:

16/f with meningococcal meningitis, who has had a temp of **103.8 since admission 3 days ago...** \*expected/unchanged!\*

67/m with irritable bowel syndrome who spiked a temp of **100.3 this afternoon**

-who is **HIGHER** priority?? **67/m** because the temp (modifying phrase) is \*unexpected/newly changed\*

**ALWAYS unstable** (regardless of if it is expected or not)

- hemorrhage
- HIGH fevers (over 105) \*seizures\*
- HYPOglycemia (low blood glucose)
- pulselessness or breathlessness
- lowest** priority: at the scene of an **unwitnessed** accident
- highest** priority: at the scene of a **witnessed** accident

FYI: What are the 3 things that result in a **black tag** at an **unwitnessed accident**?

black tag = tag them black & ship them last...

- pulselessness
- breathlessness
- fixed & dilated pupils (even if breathing & have a pulse)

4. the **MORE vital the organ**, the **HIGHER the priority**

(CAUTION; only use as a tie breaker!!)

DO we mean ORGAN of the diagnosis or modifying phrase? **modifying phrase!!!**

order of organ vitality = **brain, lung, heart, liver, kidney, pancreas**

ex:

-23/m with CHF with potassium of 6.6 (C/D level) & no EKG changes **\*heart\***

-chronic renal failure pt with a creatinine of 24.7 & pink frothy sputum (unstable) **\*lung\***

-pt with cute hepatitis with jaundice (expected) & increased ammonia level (expected) who you can't arouse (unexpected) **\*brain\* (HIGHEST PRIORITY!!!)**

### **delegation**

Do **NOT** delegate the following to LPNs...

They can **NOT** do:

-start an IV

-hang or mix IV meds

-push IV push meds... *\*they CAN maintain & document the flow\**

-administer blood or mess with central lines

-plan care (they **CAN implement** it)

-perform or develop teaching (they **CAN reinforce** it)

-take care of **unstable** pts

-do the **first** of anything!

-can't do the following assessments:

*admission, discharge, transfer or the first assessment after a change!*

ex: Who should the LPN check? Who should the RN check?

-pt with angina pectoris with crushing substernal chest pain, admitted 3 days ago & is on nitroglycerin: **LPN**

-pt who had a subtotal thyroidectomy 2 days ago & is asking, "why are they washing elephants in the parking lot?" **RN** (*thyroid storm... symptom = delirium*)

Do **NOT** delegate the following to an UAP:

-charting

-give meds (except for **topical over-the-counter barrier creams**)

-assessment (except for **vitals & accuchecks**)

-treatments (except for **enemas**)

You **CAN** delegate the following to an UAP:

-ADL's (baths, brushing teeth; but **NEVER the FIRST**)

**\*Keep in mind:** LPNs CAN do a lot of the things that \*RNs are supposed to do\* in an extended care facility, because those pts are STABLE.

Do **NOT** delegate SAFETY RESPONSIBILITIES to the FAMILY!

The RN is RESPONSIBLE!!

## **staff management**

How do you intervene with **inappropriate behavior of staff?**

- tell supervisor**
- confront them & take over immediately**
- talk to them about it at a later date**
- ignore it (NEVER do this!!)**

Ask these questions...

-is what they are doing ILLEGAL?

if **YES** - **tell supervisor!**

if **NO** - ask *\*is anyone in danger by the behavior?\**

if **YES** - **confront them & take over immediately**

if **NO** - ask *\*is this behavior legal, not harmful, but simply inappropriate?\**

if **YES** - **talk to them about it at a later date**

if NOT harmful, but illegal - **tell supervisor!**

ex: you are a LPN & suspect that a RN with whom you work is diverting narcotics for private sale and use... is it ILLEGAL? **YES**. what do you do? **tell supervisor!**

ex: you are a LPN & you walk by the room of an UAP who is giving perineal care to a patient & the UAP is NOT wearing gloves... is it ILLEGAL? **NO**. is anyone in danger by the behavior? **yes, the UAP...** what do you do? **confront them & take over immediately!**

ex: you are a LPN & notice that a RN goes home every day with bulging pockets... is it ILLEGAL? **YES (could be stealing)**. what do you do? **tell supervisor!**

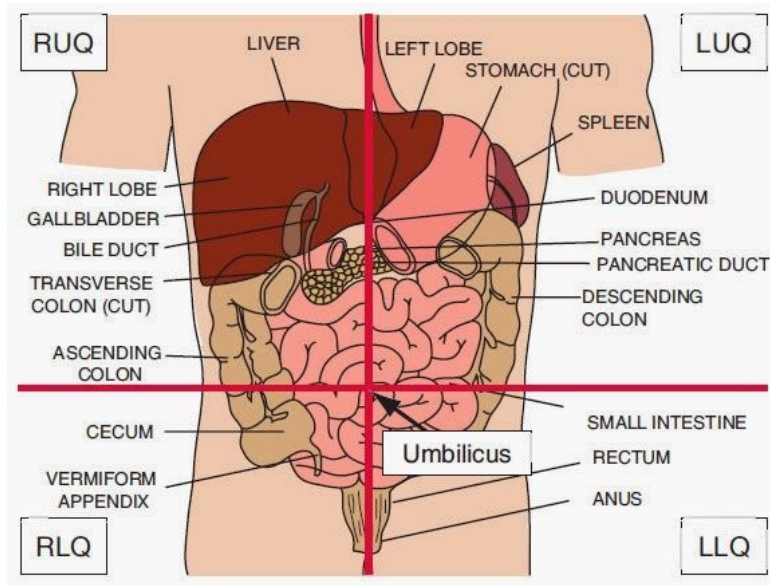
ex: you are a LPN in the OR & you notice the surgeon during surgery contaminates the pinky of his left hand? is it ILLEGAL? **NO**. is anyone in danger by the behavior? **yes, the pt...** what do you do? **confront them!**

ex: you are a LPN & when giving report a RN always says "exasperation" instead of "exacerbation" when talking about a pt with COPD... is it ILLEGAL? **NO**. is anyone in danger by the behavior? **NO...** what do you do? **talk to them about it at a later date!**

ex: you are a LPN & you see a RN take & swallow a pill... **confront them & ask "what was that pill you just swallowed?"** \*even if it's a doctor!\* NCLEX wants you to go after them!!!  
**\*SAFETY!!!\***

**HOT SPOT questions** (point & click)

**abdomen** (HOT spot \*point & click\* for where **ORGANS** are!)



**heart** (HOT spot \*point & click\* for **valves of the heart!**)  
**A... PET... M!!**

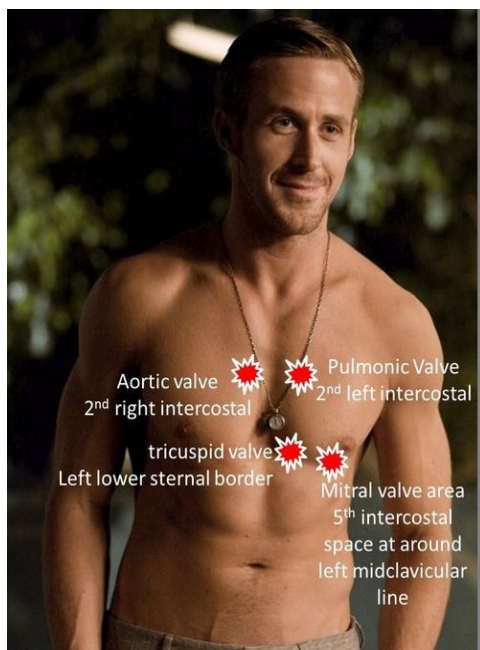
**aortic** (**2nd RIGHT** sternal border)

**pulmonic** (**2nd LEFT** sternal border)

**erbs point** (3rd **LEFT** sternal border)

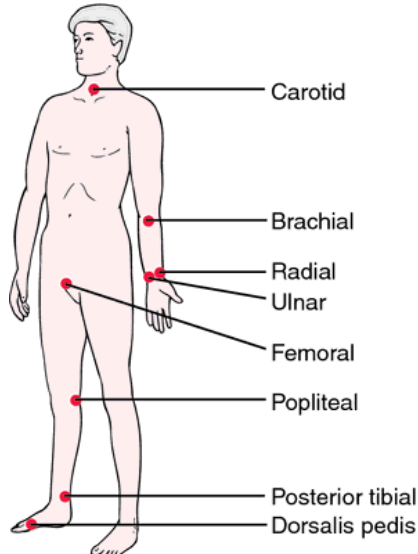
**tricuspid** (**4th LEFT** sternal border)

**mitral** (**5th mid clavicular line**) \*apical pulse!\*



**pulses**

carotid  
brachial  
radial  
femoral



**HOW DO YOU GUESS** with a question

-use **KNOWLEDGE**

-use **COMMON SENSE**

-GUESSING strategy!! \*use **CAUTION!!!**\*

**PSYCH**: the RN will examine their own feelings about something (the way you don't counter-transfer!)... **establish a trust relationship**!

**NUTRITION**: what meal would be best?! when in doubt, **pick chicken!!** :) \*not fried chicken\*..  
then **pick fish** \*not shellfish!\*..

-**NEVER** pick **casseroles** for a **child**

-**NEVER** mix meds in a child's food

-if you **EVER** mix meds in a person's food; you must ask permission!

**toddlers** get **FINGER** foods (what can they eat on the run)

**pre-schoolers** (leave them alone; they eat when they are hungry) **1 meal = OKAY**

**PHARM**:

**most commonly** tested area = **side effects**

if you know what a drug does, but not the side effects - how do you proceed?!

\*great guessing strategy: **pick a side effect in the same body system** where the drug is working...

ex: GI drug... drowsiness, tachycardia, **diarrhea**?

ex: HEART drug... drowsiness, **tachycardia**, diarrhea?

ex: CNS drug... **drowsiness**, tachycardia, diarrhea?

\*if you do **NOT know what the drug is?**!  
-is it **PO?**! pick a **GI side effect**!!! \*50/50 chance\*

**NEVER** tell a **child** medicine is **CANDY**

**OB: always check fetal heart rate!**

MED SURG:

1st thing to **assess** = **LOC**

-**not** airway

\*when you are in a CODE; you first ask the pt their name/are you okay?!

1st thing you **do** = **establish an airway**

PEDS: (growth & development)

always give the child more time (don't rush their development!)

**rules**

-when in doubt, call it **normal**

-when in doubt, pick the **older age**

-when in doubt, pick the **easier task**

GENERAL guessing skills:

**rule out absolutes**

**if 2 answers** say the **same thing**; neither are right

ex: borborygmi & increased bowel sounds...

**if 2 answers** are **opposite**; 1 is probably **right**

**umbrella** strategy: an answer that covers all of the others, without saying it does...

ex: when you transfer a pt from the bed to a chair?

-bring the chair to the bed as close as possible

-remove the foot pedal

-**use safety/good mechanics when transferring**

-lead into bed with the strong foot

if the question give you **4 right answers** & asks you to pick the one with the **HIGHEST priority** - **do the worst consequences game!**

-take each option (A, B, C & D) "if I didn't do this..."

-then choose the **worst consequence!**

ex: which of the following is the HIGHEST priority when caring for a suicidal pt?

*if you don't give him a tranquilizer... if you don't orient them to the unit... if you don't put them on suicide precautions... if you don't introduce them to the staff...?*

*what's the worst between being agitated, lost, dead or not knowing anyone?*

**if you don't put them on suicide precautions = dead!**

ex: what's the worst without sips of water... what's the worst without pain meds... *what's the worst if the side rails weren't put up... what's the worst without an abductor pillow (??) **side rails!!** \*fall/break!\**

when you are **stuck between 2 answers**; read the question (again) look for the **clues!**

**sesame street rule** (when nothing else works)

\*3 of these things belong; 1 of these things isn't the same\*

**right answers tend to be different than the others...** why? it's the only one that is correct/unique.

**DON'T be tempted** to answer a question based on **ignorance** instead of knowledge

-if you don't know the subject of the question (med, etc.) - pull it out of the question!!

ex: pen-v-k?!? it's a suspension.. teach to shake!! (**use common sense!!!**)

**if something really seems right; it probably is** (DON'T go against your gut answer!)

...ask **why something else is superior?!?**

## **USE COMMON SENSE!!!**

What **FAILS** people a lot... ☹

-the test wasn't what they **expected**

-the test wasn't what they were **hoping for**

-the test wasn't what they **wanted**

...this **breeds NEGATIVITY..** which then **affects their performance**

**YOU ARE NOT ALLOWED TO HAVE THESE EXPECTATIONS:**

-**DON'T** expect 75 questions... expect 265!

-**DON'T** expect to know everything!

-**DON'T** expect everything to go right..

## **YOU HAVE PERSERVERANCE & STRENGTH OF CHARACTER TO GET THROUGH THIS!!**