

Medication Administration Review

Department of Developmental Services

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and March 2023



Welcome to the Medication Administration Review Guide

The purpose of the medication administration review manual is to provide study guide material for the medication administration recertification exam.

It is information regarding the regulations that go with your medication certification. Please remember that your agency may have additional requirements which go beyond these requirements. Your delegating nurse will instruct you in those areas.

There are quizzes throughout the guide for you. We recommend that you try to work out the problems before looking at the answers. The answers to the questions will be on the back side of the page on which you are working.

Thank you for all the hard work you do in providing medication certification services to people with a Developmental Disability. We appreciate your effort.

Requirements for Renewing your medication certification card.

It is the card holder's responsibility to know when their med cert card expires. Please note that the month and day on your card will not change unless you let your card expire before completing the process. When you complete the process, no matter if it is 30 days or 90 days before your expiration date, only the year will be updated on your card to reflect your new certification expiration date. Your card will be valid for 2 years. There are, at times, special situations which can arise with your med certification card. Please contact your agency med coordinator to discuss these situations.

Steps to be taken to maintain your certification

- Complete pass/pour and med recert exam by 11:59 p.m. on the date your card expires.
- May start process up to 90 days in advance of the expiration date (not 91 days).
 - It gives you the advantage of taking the exam more than once if needed
 - If your card expires, you cannot pass medications until you have your new card in hand.

If you work at more than one agency

- You may start the process at either agency but whichever agency you start the process with, you must complete the process with.
 - Example, you take the recertification exam at agency 1 and fail. You cannot switch and go to agency 2 to take the next exam. You must stay with agency 1 to complete the process.
 - You will still to complete checklist A & B at both agencies to maintain your delegation with each one.

**Staff must have their card with them when
administering medications.**



Medication Administration Responsibilities

When you are the person who will be passing medications, you must:

- Check the communication log when you come on duty for any changes in the medication regime.
- Check for a signed, current, or new order from the authorized prescriber. These are your “permission slips” to give medications. If you do not have current orders, you may not administer the medication. Contact your nurse for further instructions.
- You must compare the orders to the MAR to make sure what is transcribed on the MAR is accurate. This is to be done minimally at the beginning of each month if you have been off a few days, or if a new order has been added.
- You also must check for any allergies. New allergies may arise at any time for a person taking a medication.



Control Drugs

Control drugs are medications that have been identified by the government as those that have the potential to be abused. Because of this fact, there are additional steps which must be followed when working with these medications.

- A count of these medications should be done by 2 authorized people when possible.
- You are to count these medications at:
 - The beginning of your shift
 - The end of your shift
 - When you are removing them from the bubble pack or container.
 - When they are obtained from the pharmacy. If the receipt and disposition form and the amount of medication supplied do not match, do not sign for accepting the medication. This must be resolved before you do. You must have a current med cert card to receive or transport medications.
 - Any time the keys are exchanged between med certified staff.
- These medications must be kept in a locked cabinet in a locked non-removable box.

**If at any time, you discover an incorrect count, you
must notify your nurse/chain of command
immediately!**



KNOW THE MEDICATIONS YOU ARE GIVING!

It is your responsibility to know the:

- Therapeutic (Desired) effect—This is when the medication worked the way it was intended. For example, a pain medication is given to an individual for complaint of a headache, 30 – 60 minutes later the individual reports the headache is gone. It has worked as intended.
- No effect- The medication did not work as intended. For example, a pain medication is given to an individual for complaint of a muscle ache, 30 – 60 minutes later the individual reports that they are still in pain. This needs to be reported to the nurse or per agency policy.
- Side effects—Any response to medication that is not the desired/therapeutic effect. Side effects are usually mild and may not warrant discontinuing the medication. These may include nausea, headache, difficulty sleeping, fever, muscle twitching or tics. Must be reported to the nurse or per your agency policy.
- Adverse Effect – This is an undesired harmful effect which may be mild, moderate, or severe. The prescriber will usually D/C the medication.
- Allergic Reaction – This is a serious body response that must be reported to your nurse or per your agency policy. It may include a rash, hives, watery eyes, wheezing and coughing.
- Anaphylactic Reaction – A whole body (systemic) allergic reaction, that may include wheezing, swelling, difficulty swallowing and breathing or death. This is a 911 emergency. If the individual has an auto-injectable epinephrine pen (Epipen) and you have received training, it should be

administered, and the person should be seen at the emergency department.

- Usual dose—what is the typical amount of medication a person would receive when taking this medication.
- Any special instructions---does it need to be taken with food, without food, on an empty stomach, not with dairy products, not with grapefruit, in the morning, etc.
- Drug to drug interactions---are there any medications that should not be taken at the same time as this medication

If you are unsure of the answer to any of these questions, ask your nurse or pharmacist.

Do not pass a medication for which you do not know this information!



Notification Responsibilities

Call the nurse or the nurse on call or as per your agency policy:

- *With any new med or change in med dose, time, or manner to be given.*
 - Regarding a change to a med, the bottom line to remember is that if you are going to make any changes to something already written on the med kardex, it must be approved by the nurse first.
- *With any change in an individual's status*
 - This includes if PRN medications are needed. Call before giving a PRN medication, as it indicates a change in the person's health status, unless they have already given you a written protocol.
 - Once the nurse has been notified about that change in condition, they may give you additional instructions, for that occurrence only, for that medication.
 - Example, Mary had a tooth pulled. You notify the nurse, and they tell you, you may give the pain med the next 24 hours if needed, without notifying the nurse each time, unless there is a further change in the person's condition.



When you call the nurse, remember to write down the directions and read them back to the nurse before you complete the call.

Notification Responsibilities

Call the nurse or the nurse on call or as per your agency policy:

- *Any time you discover a med error*—the nurse, no one else, determines the action to be taken.
- *When you need information* on a medication or with any health-related questions.



For a **MEDICAL EMERGENCY CALL**
911!

If a medical emergency arises, call 911 first and then notify your nurse/chain of command as soon as possible. You want to get the emergency care started to your location as soon as possible.



Notification

Responsibilities

Call the Pharmacy

- When you notice a change in the color/size of a medication— Verify with the pharmacist it is the correct medication.



- When you need information on a medication—new meds are coming out every day which may not be listed in a drug book.



- When you can't read the medication label—remember you cannot give a medication if you cannot do the rule of 3!

One hour window

- Applies to routine medications which are the medications scheduled to be given every day.
 - Example: Risperdal 1 mg PO at 8 pm is ordered to be given every day. The earliest you could give it is 7 pm and the latest is 9 pm.
- This rule does not apply to PRN medications. PRN medications must be given at the exact time frame identified or longer.
 - Example: Tylenol 650 mg PO q4h if needed for headache. You last gave it to John at 8 am. The earliest you could give it to him is 12 noon or later.
- Refusals---If the person refuses a medication, do not force them to take it.
 - Place the medication back in the med cabinet as per agency policy, labeled with all the appropriate information listed on it.
 - Offer the person the medication again, within the hour window.
 - If the person still refuses the medication, contact your nurse or as per your agency policy.

Remember!

Any time a med would be given outside the one-hour window (for any reason), the nurse/chain of command must be notified, and directions received on how to handle the situation.

General Concepts

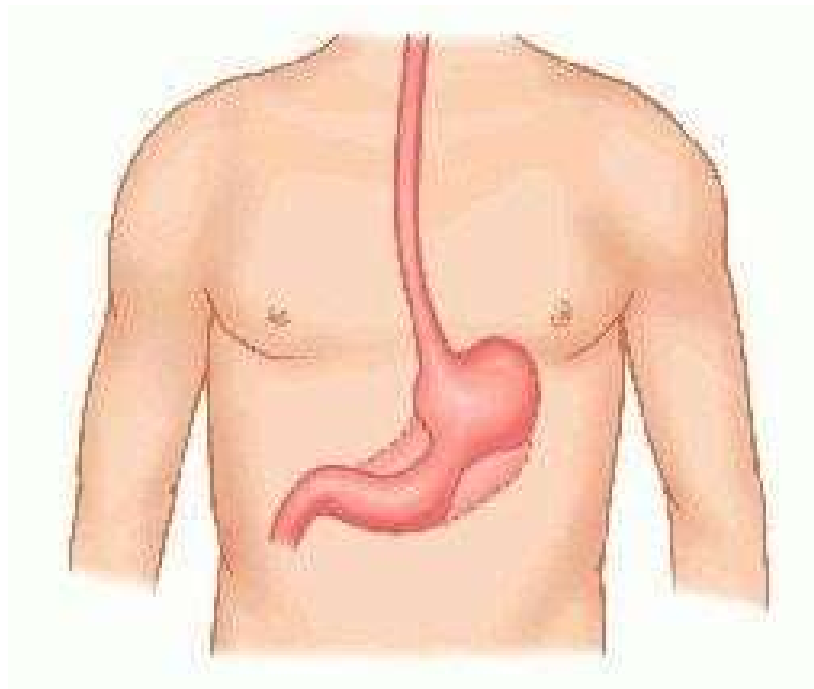
Empty Stomach

The times that medications may be ordered to be given, can depend upon whether or not the med needs to have more or less acid in their stomach at the time they take it to work effectively.

The term empty stomach is referring to taking the medications in relation to when they would eat a meal, not just a snack.

If a medication is ordered to be given on an empty stomach, it means the medication would be given

**One hour before a meal
or
Two hours after a meal**



Medication Administration Process Preparation Reminders

Safe medication administration includes:

1. Following specific steps that should occur prior to, during, and after all medication administrations
2. Completing specific tasks prior to and following each individual medication administration
3. Verifying the 5- Rights, the licensed prescriber's orders, MAR, pharmacy label, and controlled drug disposition sheet

Before Medication Administration:

1. Count controlled medication
2. Read the communication log if applicable for any medication related issues that may affect medication administration.
3. Review any new medication orders, check to see that all information is complete, make sure medication has not already been administered
4. Ensure familiarity with new medications; this may require reviewing the medication in a drug reference book or a reputable online resource

During the Medication Administration:

1. Perform hand hygiene
2. Approach the task calmly without any distractions
3. Assemble the necessary equipment needed for a single individual (pre-pouring medications for multiple individuals at one time is not allowed)
4. Unlock secured medication storage area
5. While pouring the medication ensure that the 5-Rights are correct (follow agency-specific policy to verify accuracy)
6. Ensure medication is locked/secured when leaving area
7. Identify the correct person per agency policy
8. Administer the medication according to proper technique
9. Check that the individual has swallowed the medication per agency procedure

After Medication Administration:

1. Ensure that all documentation is completed accurately
2. Double check documentation for accuracy and completion
3. Ensure the area is cleaned
4. Perform hand hygiene



Medication Administration Process

The Five Rights

Right Individual (The person's name. Use photo or ask person their name, or ask co-worker)

Right TIME (When med should be given.)

Right DRUG
(Name of the med)

Right DOSE (How much of the medication they should receive. Look for mg or percentage of solutions.)

Right SITE (ROUTE) (How the gets into the body)



The Five Rights MUST be on the MAR and med label in order to pass a medication.

Medication Administration Process

The Rule of 3

The 5 rights and the rule of 3 go together.

What this means is that you will compare the 5 rights on the MAR against the medication label (which will also have the 5 rights) 3 times **before the person ever receives the med.**

Comparing the 5-Rights on the MAR to the Medication 3 times PRIOR to administering

- ✓ **Check Dot (compare when removing med from cabinet)**
- ✓ **Check Pop (compare prior to pouring med)**
- ✓ **Check Sign (compare prior to signing and administering med)**



Requirements for a complete prescriber order

You must have all of the following for an order to be complete:

➤ The 5 Rights

- Individual, time, drug, dose, site



➤ Expiration date---Example x 90 days, x 2 days

- the longest length of time is 180 days for group homes.
ICF facilities have a 90-day maximum order time.

Example: Keflex 500 mg PO QID x 10 days



➤ PRN medications

- Need a reason or rationale
- Example: Benadryl 25 mg PO q4hrs PRN for itching for 7 days.
- Can only be given for the condition identified.



➤ Prescriber signature and date



What is wrong or missing with these orders

OR
Is the order correct?

Assume you have a person's name, prescriber signature and date.

1. Depakote 500 mg PO BID _____
2. Benadryl 25 mg PO PRN for allergy symptoms x 10 days

3. Lasix 2 tabs PO QD x 90 days _____
4. Haldol 5 mg TID x 90 days _____
5. Tylenol 625 mg PO Q4hours PRN x 10 days _____
6. Multivitamin 1 tab PO qAM x 180 days _____
7. Topamax 25 mg PO BID x 7 days _____
8. Synthroid 0.175 mg PO every day _____
9. Zyprexa 1 tab PO qHS x 90 days _____
10. MOM 30 cc PO qHS PRN x 180 day

(Answers are on the next page)

Answers to questions on previous page

1. **Depakote 500 mg PO BID** No expiration date
2. **Benadryl 25 mg PO PRN for allergy symptoms x 10 days**
No time frame for how often may be given (i.e. q4h, etc.)
3. **Lasix 2 tabs PO QD x 90 days** No mg strength on tabs
4. **Haldol 5 mg TID x 90 days** No site (route)
5. **Tylenol 625 mg PO Q4hours PRN x 10 days** No reason
6. **Multivitamin 1 tab PO qAM x 180 days** Correct
7. **Topamax 25 mg PO BID x 7 days** Correct
8. **Synthroid 0.175 mg PO every day** No expiration date
9. **Zyprexa 1 tab PO qHS x 90 days** No mg strength for tab
10. **MOM 30 cc PO qHS PRN x 180 day** No reason

How did you do?

Review the material on what is needed for a complete order if you had difficulty.

MEDICATIONS AND DELEGATION REMEMBER!!!!

Any medication administration is a delegated task. This means your nurse has provided you with training, directions and indicated you are delegated to administer this form of medication.

Certain medications require additional training from your delegating RN before you administer the medications. What are they???



G-Tubes



Nebulizers



Inhalers

The things listed above are true, but the most accurate answer is:

Medications requiring additional training are
ANY form of medication
in which the RN has NOT PREVIOUSLY INSTRUCTED and
DELEGATED to you.

Remember----there are other delegated tasks that require training from your RN but may not be associated with medications.



When Administering Medications

Follow the rule of 3 and the 5 rights previously reviewed.



You compare the 5 rights on the MAR against the 5 rights on the medication label, 3 times **before the person ever receives the med.**

- ✓ **Check Dot (compare when removing med from cabinet)**
- ✓ **Check Pop (compare prior to pouring med)**
- ✓ **Check Sign (compare prior to signing and administering med)**

Critical points to remember:

- Know the correct consistency for each individual
 - If they are on a pureed diet, you will be instructed by the nurse if you are to crush the medication. Remember you must have a prescriber order to crush medications.
 - If you use a thickening agent in their liquids, you will probably need to use a thickening agent in liquid medications. Ask your nurse for directions.
- **Sign** for controlled drugs on the receipt and disposition record **when you remove them** from the container.

Critical points continued:

➤ Identify the correct individual

- Use a photo ID
- Ask the person to tell you their name.
- If you get distracted while passing a medication, here are things you can do to be sure you have the correct person:.
 - Look at the picture before you give the medication and verify that you are giving it to the correct person.
 - You can ask the person to tell you their name. Do not address them with their name as some people may not be good reporters.

Can you tell me
your name?

My name
is Sarah.



Medication Routes

Oral Medications

❖ Be sure of appropriate consistency and diet orders

- Remember, meds should be given with the same criteria as the food they eat or liquids they drink.
- Ask your nurse if you have questions.
- You must have a Prescriber's order to crush a med.



❖ Be sure the person is sitting up.

DO NOT give oral meds to a person who is lying down or semi-reclining.



❖ Give the person a choice of water or juices.

- The fluids will help wash down any particles of the medications, especially if they were crushed.
- It is a good way to help with adequate hydration or fluid intake.



Medication Routes

Oral Medications continued

❖ Make sure the med is swallowed.

- Ask the person to open their mouth so you can see.

Why is this step important?

- A person hides/cheeks their medications or does not take them.
- Medical professionals look at the response to what they ordered and make adjustments to their medication orders based on what is seen or reported.
- Outcome could be unpredictable if they do not take them as ordered.



Make sure that medications---especially liquids— are in the **correct consistency** for administration.

Medication Routes

Oral Medications continued

➤ Advantages

- Most commonly used form
- Easy to administer
- There is the ability to remove them if an overdose situation occurs.



➤ Disadvantages

- Can irritate the GI track
- Absorption can be unpredictable
- Absorption is usually in 30 to 60 minutes
- Not good in an emergency situation due to absorption time frame.



Medication Routes

Oral Medications- **Enteric Coated**

- Coated with hard shell so it will pass through the stomach and dissolve in the intestines.
- Advantage ○ Will not cause stomach upset
- Disadvantage ○ Cannot be crushed or chewed



Oral Medications - **Time Released**

- Medication is released into the body system over a period of time.
- Advantages
 - Decreases the number of times a day a med may need to be taken
 - Effects last longer in the body

Abbreviations generally seen: XL, ER, SA, LA, DR, X

- Disadvantages
 - Cannot be crushed or chewed
 - May cause an overdose

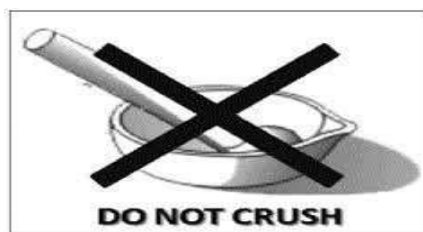


Fig. 2—"Do not crush" label.

Medication Routes

Sublingual Medications (abbreviation SL)

- General information
 - Medication placed under tongue to dissolve.
 - Wear gloves if you are administering the med.
- Advantages
 - Good in emergency
 - Absorbed directly into the bloodstream
 - Fast acting
- Disadvantages
 - Unpleasant taste
 - May irritate lining of the mouth.
- Administration Procedure
 - Give a sip of water to moisten mouth prior to administration
 - Person should swallow water before giving med
 - Med should not be chewed or swallowed
 - Give nothing to eat or drink until med has dissolved.
 - Wear gloves if you are placing a medication in the mouth



Medication Routes

Liquid Medication

➤ Suspensions

SHAKE SHAKE SHAKE

- Be sure to shake container before pouring
- If not shaken, can under or overdose a person as med particles are not evenly mixed

➤ Syrups

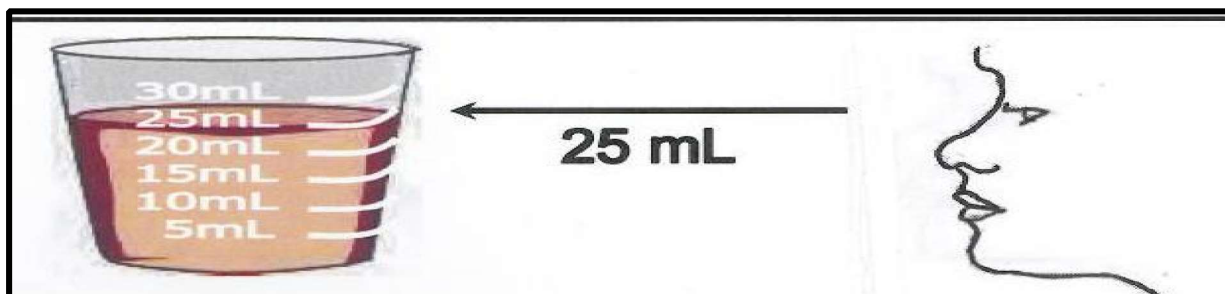
- Can contain a high sugar content
- Be careful with diabetics as can increase blood sugar level unless using a sugar free syrup

➤ Elixirs

- Contain an alcohol base
- Use with caution with people who have addiction history

The Golden Rule for pouring liquid medications

- ✓ Set the cup on a FLAT SURFACE
- ✓ Be at EYE LEVEL with the cup
- ✓ Keep the LABEL IN THE PALM OF YOUR HAND



NOTE: If you do not follow the “golden rule” for pouring liquid medications, you may not be administering the correct amount of medication. You have the potential to overdose or under dose a person when process is not followed.

Medication Routes

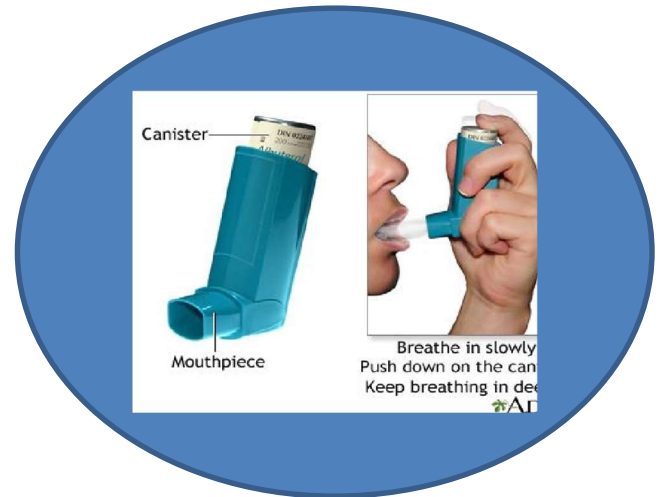
Pulmonary Medications (medications that assist with breathing)

➤ Advantages

- Absorbed quickly so can work within minutes
- Have a local and systemic effect
- Good in an emergency

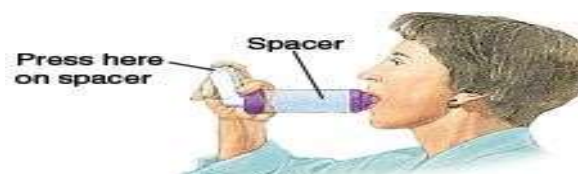
➤ Disadvantages

- Can increase the heart rate
- Can cause tremors
- Can cause hyperactivity
- Can cause restlessness
- May have an unpleasant taste
- May be difficult to administer correct dose



➤ Process

- Make sure canister is not empty - many have counters
- Ask person to exhale (blow their air out)
- Administer medication when they begin to inhale deeply (take a breath in)
- Instruct person to hold their breath for several seconds and then exhale slowly.
- If 2 puffs are to be administered, wait at least one minute before administering the second puff to increase effectiveness
- Provide a mouth rinse after the med is given
This step helps prevent the possibility of getting thrush with the use of this medication. (Mouth infection)
- If a person has difficulty following the administration process, a spacer may be used to help them inhale the medication.



Medication Routes

Topical Medications (Always wear gloves when applying)

- Types of Medications: Ointments, Creams, Lotions, and Powders
- Advantages
 - Usually easy to apply
 - Generally, produces a local effect depending on function of medication.
 - Can be absorbed systemically over time
- Disadvantages
 - May be toxic if swallowed
 - Accurate dose cannot be specified
 - E.G.; Prescriber may order to “apply liberally” or “sparingly” which may be unique to a person’s definition
 - Particles from powder may be inhaled
- Process
 - Always wear gloves when applying medication
 - Sprinkle powders onto gauze and then apply. Do not shake above area to be applied to unless directed.



Medication Routes

Topical Medications continued

Transdermal Medications---medications are delivered via a patch on the skin

➤ General Guidelines

- Wear gloves when applying or taking off. You could have contact with the med and absorb it through your skin if not wearing gloves.
- Remove the old patch. If you are putting on a new patch, be sure the old patch has already been removed or remove it. Discard it appropriately
 - Take the patch off.
 - Fold it in half so the medication is on the inside when folded.
 - Throw it away in the med room for safety.
 - Apply new patch to clean, dry, intact skin
 - Do not apply over an open sore or wound
 - Apply patch where the body has good blood flow
 - Do not apply over scar tissue or callused tissue.
- Rotate the sites where you place the patch
 - If sites are not rotated, increased chance for skin irritation
- Document where you place the patch
 - Ask your delegating nurse the procedure for your agency regarding documentation of these patches.



Medication Routes

Topical Medications continued

Transdermal Medications continued

➤ Advantages

- Systemic effect
 - Typically, will impact the whole body but some are designed for local effect. Learn about the med to see which it is.
 - Specific dose is contained in the patch. Pre-determined by manufacturer.



➤ Disadvantages

- Not effective in an emergency. These are slowly released over a long period of time.
- May irritate the skin
- Absorption of dose may be affected by skin condition and circulation.

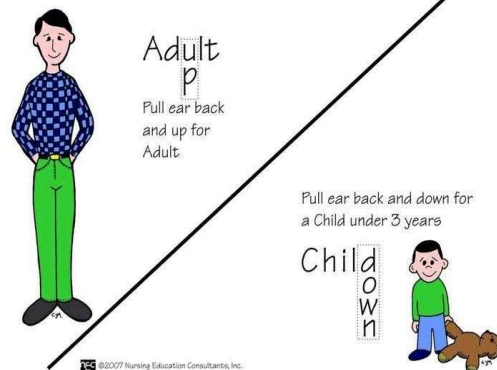
Medication Routes

Otic/Ear medications—Produces a local effect

- Warm bottle by rolling it in the palm of your hands for a few minutes
 - Do not heat in microwave or boiling water---could burn ear
 - If process not done, can cause pain, nausea, and dizziness
- Position head with affected ear up
- Pull the pinna (the cartilage part of the ear) up and back for an adult.
Think of grown **up** for an **adult** regarding the pinna
For a child, (3 years old and under) pull the pinna down and back
- Administer the proper number of drops without touching the inside of the ear
- The person should stay in the position for 3 to 5 minutes before moving.



EAR DROPS ADMINISTRATION



**DO NOT PUT ANYTHING IN THE EAR CANAL UNLESS
PRESCRIBED BY A PRESCRIBER!**

**YOU ARE NOT ALLOWED TO EVER CLEAN
THE EAR CANAL WITH A Q-TIP**



Medication Routes

Optic/Eye Medications---Produces a local effect

Procedure for eye drops

- Have the person seated with head back, looking up and away.
- Pull the lower lid down to form a pocket
- Instill ordered number of drops in pocket without letting dropper touch the eye
- Have the individual lean towards the affected side to eliminate chance of cross contamination
- Remember to wear gloves and have a tissue in case drops run down cheek.
- Some drops may burn when administered



Procedure for eye ointments

- Have the person seated with head back, looking up and away.
- Pull the lower lid down to form a pocket
- Begin at the inner corner of the eye moving to the outer corner
- Squeeze a thin ribbon of medication into the lower lid
- Stay with the person and observe as vision may be cloudy **Remember** when you administer an **eye ointment** the vision could be **blurry**, so they are a **fall risk** until the vision clears.

Medication Routes

Nasal Medications

- Produces a local effect

Types of nasal medications include sprays, pumps, and drops

Procedure:

- Have the person clear their nose by blowing
- Head should be tilted slightly back
- Insert bottle tip no more than 3/8"
- The other nostril should be held closed
- Ask the person to breath in as bottle/pump is depressed
- Person should not blow nose after administration
- If order is for administration of medication to both nostrils, you do not have to wait a specific time interval before administering in the other nostril



Medication Routes

Rectal Medications

General Information

- Types of rectal medications include suppositories and enemas
- They are given via the rectum or PR
- They do not melt till reach body temp
- They take approximately 15 to 30 minutes to start working
- Advantages
 - May be used with unconscious person
 - May be used if vomiting present or difficulty swallowing
- Disadvantages
 - May be embarrassing for giver and receiver of medication
 - Person may have difficulty retaining medication



Procedure

- Do with two staff whenever possible
- Assemble all equipment prior to starting
- Wear gloves!
- Place suppository in med cup with lubricant
- Position the person in the **Sims** position (lying on left side with right knee slightly bent)
- Insert the medication approximately 3 to 4 inches
- Person should retain the medication for 10 to 15 minutes



Medication Routes Quiz

1. Medication is placed under the tongue _____
2. When giving nose drops, do not go in more than _____ inch.
3. Enteric coated or time released meds should not be _____.
4. When pouring a liquid medication, the rules are _____, _____, and _____.
5. When preparing a suspension, be sure to _____ the bottle.
6. It is important to wait how long between 2 puffs of a pulmonary inhaler medication. _____
7. If you instill an eye ointment into a person's eye, what risk factor could they have? _____
8. When placing eye drops in a person's eye, you have them lean _____ the affected eye.
9. When giving a suppository or enema, a person should be in the _____ position.
10. When applying a topical medication, make sure you are wearing _____.
11. Meds given on an empty stomach are given _____

Medication Routes Quiz Answers

1. Medication is placed under the tongue **sublingual**
2. When giving nose drops, do not go in more than **3/8** inch.
3. Enteric coated or time released meds should not be **crushed**.
4. When pouring a liquid medication, the rules are **flat surface, eye level, and label in the palm of your hand.**
5. When preparing a suspension, be sure to **shake** the bottle.
6. It is important to wait how long between 2 puffs of a pulmonary inhaler medication?
One minute
7. If you instill an eye ointment into a person's eye, what risk factor could they have? **Fall risk till the vision clears**
8. When placing eye drops in a person's eye, you have them lean **toward** the affected eye.
9. When giving a suppository or enema, a person should be in the **Sims** position.
10. When applying a topical medication, make sure you are wearing **gloves**.

Meds given on an empty stomach, are given **1 hour before or 2 hours after a meal.**

How did you do?

Be sure to review the information if you have any concerns about types of medications.

After Administering Medications

- ✓ Complete all documentation/**review** MAR for initials



- ✓ Wash your hands

- ✓ Monitor the individual for response

- ✓ Notify RN of any observations/problems with med administered



- ✓ Clean up/restock the med area



Documentation of Medication

- ✓ Documentation of medications may be done at the time of pouring the medication or as soon as possible following administration
- ✓ Control drugs have a separate form called the Receipt and Disposition Record
 - best practice is to sign at the time of pouring
 - This is the sheet you sign that is matched to each control medication, which lists how much medication was received, and how much is left each time after it is administered. You need to match the **Rx #** on the Receipt and Disposition Form with the Medication label.
- ✓ Use only approved abbreviations when documenting
- ✓ ALL new orders require you to notify RN prior to starting medication
- ✓ Orders transcribed onto MAR need to be checked by another med certified staff or nurse before med is administered. Both sets of initials must be on MAR. If this is not possible, discuss situation with RN.
- ✓ Changes to medication dosages or frequency of administration are treated as new orders.
- ✓ PRN documentation is required on the front and back of the MAR along with the effect of the medication.



REMEMBER: A PERSON'S RECORD IS A LEGAL DOCUMENT!

ABBREVIATIONS REVIEW

Abbreviations associated with Time:

Q _____
QD _____
BID _____
TID _____
QID _____
QOD _____
PRN _____
Q2h/Q4h _____
AC _____
PC _____
STAT _____
HS _____

Abbreviations Associated with Route or Location of Administration:

AS _____
AD _____
AU _____
OS _____
OD _____
OU _____
SL _____
NPO _____
Optic _____
Otic _____
PR _____

Abbreviations associated with Medication Dosage Verification:

cc _____

mcg _____

oz _____

i _____

gtt _____

gm _____

mg _____

tsp _____

TBSP _____

ml _____

Additional Abbreviations:

NKA _____

NKDA _____

Tab _____

Cap _____

Liq _____

NTE _____

MAR _____

Supp _____

D/C _____

Rx _____

OTC _____

ABBREVIATIONS REVIEW ANSWERS

Q - Each or Every

QD - Each Day

BID - Twice a Day

TID – Three Times a Day

QID – Four Times a Day

QOD – Every Other Day

PRN – As Needed (Pro Re Nata)

Q2h/Q4h – Every 2 hrs/ Every 4 hrs

AC – Before Meals

PC – After Meals

STAT – Immediately

HS – At Hour of Sleep

Hint: For before meals and after meals=you have the appetizer and cocktails (ac) before a meal and the pie and coffee (pc) at the end of the meal.

AS – Left Ear

AD – Right Ear

AU - Both Ears

OS – Left Eye

OD – Right Eye

OU – Both Eyes

SL – Sublingual (Under tongue)

NPO – Nothing by Mouth

Optic – Eye

Otic - Ear

PR – Per Rectum

ABBREVIATIONS REVIEW ANSWERS

cc – cubic centimeter

mcg - microgram

oz - ounce

I - one

gtt - drop

gm - gram

mg - milligram

tsp – teaspoon

TBSP - tablespoon

ml – milliliter

NKA – No known allergies

NKDA – No known drug allergies

Tab - Tablet

Cap - Capsule

Liq - Liquid

NTE – Not to exceed

MAR – Medication administration record

Supp - Suppository

D/C - Discontinue

Rx – Prescription

OTC – Over-the-counter

Drug Classifications



Whenever you see the sun before a drug class, it means that if a person is on a medication in this class, they are more sensitive to a sunburn occurring. This is called **photosensitivity**. If you see this, precautions you would take include using sunscreen, have them wear a cap and sunglasses whenever possible.

Analgesic---Drugs that relieve pain without loss of consciousness (pain reliever). Can range from OTC to narcotics. Examples: Aspirin, Percocet, Vicodin



Antibiotics—Drugs used to prevent or destroy growth of harmful organisms. Meds in this group can cause an allergic reaction all of a sudden even if the person has taken them before with no difficulty. Examples: Ampicillin, Erythromycin.



Anticonvulsants—also called antiepileptics. These medications are used to control seizure disorders. They require fasting blood work to check for therapeutic or toxic levels in the blood. Your nurse will provide you with directions regarding the meds if lab work is ordered. If you make a mistake and give these meds when you were told to hold them, notify your nurse or follow agency policy immediately as it can change the lab outcome. Two key signs of when these levels might be high are tiredness and difficulty walking. Examples: Dilantin, Klonopin, Tegretol, and Depakote.

Antihistamines—Drugs used to reduce symptoms of allergic conditions. Examples include Benadryl, Claritin, Chlor-Trimeton, Allegra

Antitussives—Drugs that suppress the cough reflex. Example: Robitussin DM

Antifungal – Drugs used to fight fungal infections such as ringworm, athlete’s foot, and toenail fungal infections. May be in oral or topical forms. Examples: Clotrimazole, Ketoconazole

Antihistamine – A drug that works against the histamine released in the body during an allergic reaction by blocking the action of the histamine on the tissue. Examples: diphenhydramine (Benadryl), loratadine (Claritin)

Antipyretic – Drugs used to work against a fever by lowering the body temperature. Some analgesics also have antipyretic effects. Examples: Aspirin, Tylenol, NSAID

Bisphosphonate – Used to treat osteoporosis, a condition in which the bones become brittle and fragile. Must be taken with 6-8 oz of water and not allow person to lie down, eat or drink anything for 30 minutes after, can cause irritation of the esophagus. Examples: Fosamax, Evista, Acetone, and Reclast

Bronchodilator – Drug that dilates (opens) the airway (bronchial tubes) of the lungs by relaxing bronchial muscles, which improves breathing when a person is experiencing shortness of breath or difficulty breathing, such as during an asthma attack. Examples: albuterol (ProAir, Preventil, Ventolin)

Decongestant – Drug used to shrink the swollen membranes in the nose, making it easier to breathe. Example: pseudoephedrine (Sudafed)

Expectorant – Drug used to help bring up mucus and other material from the lungs, bronchi, and trachea. Example: guaifenesin (Mucinex)

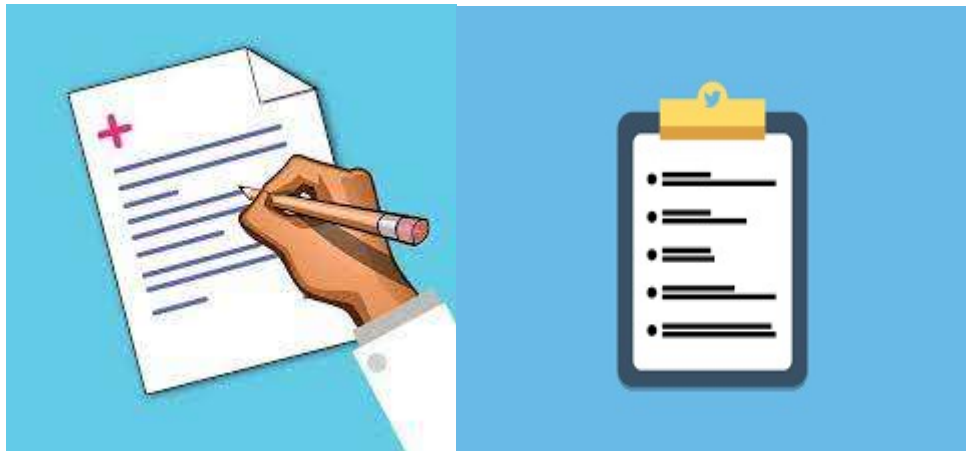
Hormonal Medications – include oral contraceptives and hormone replacement for conditions in which the body does not produce enough of a specific hormone such as hypothyroidism. Example: thyroxin (Synthroid), Lo Loestrin Fe or Junel Fe

Hypnotics—Drugs used to produce sleep. Example: Ambien, Restoril, Halcion

Laxative – A medication which helps with emptying of the bowels (BM). Used to combat constipation. May come in pills, capsules, liquids, suppositories, powders, and enemas. Examples: Mild of Magnesia (magnesium hydroxide), Dulcolax (Bisacodyl) suppository or tablets, MiraLAX (polyethylene glycol)

Scabicide and Pediculicide – Scabicide treats scabies; Pediculicide treats lice

Sedatives—Drugs used to relax a person without producing sleep. Examples: Chloral Hydrate, Ativan.



Cardiovascular Medications---Drugs that are given for the heart and/or circulatory system. There are 6 different groups in this category:

1 - Antiarrhythmic – works against irregular heart rhythms and allows the heart to beat at a regular rhythm and rate. Some of these medications may require a pulse to be taken for a full minute before administering medication. Example: Digoxin (digitalis), Rythmol (propafenone), Lanoxin



2 – Antihypertensives - meds given to treat high blood pressure. Your nurse may instruct you to take their blood pressure on a specific time interval. Examples: Toprol-XL, Lisinopril, Norvasc (amlodipine)

3 - Diuretics—meds given to rid the body of excess fluids.

- the fluid loss contains potassium. Some foods high in potassium that you may be instructed to include in their diet are: potato skins, bananas, dark green vegetables, leafy green vegetables or orange juice. Examples: hydrochlorothiazide, Lasix (furosemide)

4 – Anticoagulants—used to prevent or decrease clot formation. These meds will cause a person to bleed for a longer period before the bleeding stops which is a safety issue. Examples—Coumadin, Miradon.

- Notify the nurse if you see an increase in bruising or nose bleeds
- Be sure to use electric razors for safety.

5 – Vasodilators—Increase blood supply to tissues with a poor blood supply by dilating vessels. Examples: Loniten, Apresoline (hydralazine)

6 - Cholesterol Lowering Medication – These medications decrease the level of cholesterol. Examples: lisinopril (Zestril), Norvasc

Drug Classifications



There are four types of Psychotropic Medications:

1. Antianxiety
2. Mood stabilizers
3. Antidepressants
4. Antipsychotics

Antianxiety—Drugs used to treat anxiety/tension. Examples: Ativan, Xanax, Valium.

KEY POINT—an important consideration when someone is on a **sedative or antianxiety medication** is that it can make them very tired so they could become a **fall risk**. This is especially important to remember if they are used only for a pre-sedate purpose.

Mood Stabilizers - commonly used to treat bipolar mood disorder and at times schizoaffective disorder. Examples lithium, valproic acid, divalproex sodium (Depakote), carbamazepine (Tegretol), and lamotrigine (Lamictal).

Antidepressants—Drugs used to elevate mood. They may take 2 to 4 weeks before you see an effect. Examples include Lexapro, Zoloft, Paxil, Prozac.

Antipsychotics - also called Neuroleptics - These are drugs that control and moderate behavior and have the potential for severe side effects and adverse effects.

Key Points:

- ✓ Antipsychotics treat psychosis, which is a psychiatric disorder which results in a deterioration in personality, and loss of contact with reality. Schizophrenia is an example of a psychiatric disorder.
- ✓ Do you remember what the sun means...? Photosensitivity. What do you need to remember to do for this?
- ✓ These meds can cause early onset, late onset, or at anytime side effects
- ✓ Examples: Zyprexa, Risperdal, Clozaril, Geodon, Seroquel

Early Side effects ---typically occur 5 to 60 days after starting the medication

- ✓ Early onset side effects may include symptoms such as restlessness, tremors, shuffling gait, rigidity, and sedation
- ✓ Any symptoms that are outside of the individual's baseline should be reported to the nurse/chain of command immediately
- ✓ Early reporting of side effects due to antipsychotic medications may prevent long term complications from developing. There may be meds that could be given to help these symptoms

Late Onset Side Effect—Tardive Dyskinesia

- ✓ Generally, occurs after 3-6 months
- ✓ Characterized by abnormal, involuntary movements of the lips, tongue, and jaw-blinking, frowning, twitching and jerking movements of arms and legs.
- ✓ Early recognition is essential to the person's well-being.
- ✓ Notify the nurse/chain of command right away if symptoms are seen.
- ✓ These effects may be irreversible

Neuroleptic Malignant Syndrome (NMS)

- ✓ Any time onset---from first day to months after starting med, but typically within 30 days of starting medication
- ✓ Symptoms include
 - Muscle rigidity
 - Parkinsonian like symptoms (drooling, stiffness, shuffle gait, etc.)
 - **F** (fever)
 - **E** (encephalopathy/brain swelling)
 - **V** (vitals unstable)
 - **E** (elevated enzymes if blood work drawn)
 - **R** (muscle rigidity)



THIS REQUIRES EMERGENCY CARE! CALL 911!



HAS A 10% DEATH RATE ASSOCIATED WITH I

Drug Classification Quiz (Answers are on the next page)

Match the med topics in Column A with the answer in Column B

| | |
|---|---|
| ____ Analgesics | A Life-threatening antipsychotic reaction that can occur at any time |
| ____ Antibiotics | B Used to treat psychotic behavior, also call neuroleptic |
| ____ Anticonvulsants | C All produce photosensitivity, apply sunscreen |
| ____ Antidepressants | D Used to treat anxiety, tension, nervousness |
| ____ Antihistamines | E Used to relax a person without producing sleep, has calming effect |
| ____ Hypnotics | F Given to rid the body of excess fluid |
| ____ Sedatives | G Tardive dyskinesia, notify RN if symptoms seen |
| ____ Antianxiety | H Drugs used to prevent or destroy growth of harmful organisms |
| ____ Diuretics | I Used to elevate the mood |
| ____ Antitussives | J Used to address allergy symptoms or allergic reactions |
| ____ Antipsychotics | K Restlessness, tremors, shuffling gait, rigidity, and sedation |
| ____ Neuroleptic Malignant Syndrome (NMS) | L Relives pain without loss of consciousness |
| ____ Antipsychotic early side effect | M Used to control seizures, also called antiepileptic's |
| ____ Antipsychotic late adverse reaction | N Suppress cough reflex |
| ____ Antibiotics, Anticonvulsants, Antipsychotics | O Produce sleep |

Drug Classification Quiz Answers

| | |
|--|---|
| <u>L</u> Analgesics | A Life threatening antipsychotic reaction that can occur at any time |
| <u>H</u> Antibiotics | B Used to treat psychotic behavior, also call neuroleptic |
| <u>M</u> Anticonvulsants | C All produce photosensitivity, apply sunscreen |
| <u>I</u> Antidepressants | D Used to treat anxiety, tension, nervousness |
| <u>J</u> Antihistamines | E Used to relax a person without producing sleep, has calming effect |
| <u>O</u> Hypnotics | F Given to rid the body of excess fluid |
| <u>E</u> Sedatives | G Tardive dyskinesia, notify RN if symptoms seen |
| <u>D</u> Antianxiety | H Drugs used to prevent or destroy growth of harmful organisms |
| <u>F</u> Diuretics | I Used to elevate the mood |
| <u>N</u> Antitussives | J Used to address allergy symptoms or allergic reactions |
| <u>B</u> Antipsychotics | K Restlessness, tremors, shuffling gait, rigidity, and sedation |
| <u>A</u> Neuroleptic Malignant Syndrome (NMS) | L Relives pain without loss of consciousness |
| <u>K</u> Antipsychotic early side effect | M Used to control seizures, also called antiepileptic's |
| <u>G</u> Antipsychotic late adverse reaction | N Suppress cough reflex |

| | |
|---|-----------------|
| <u>C</u> Antibiotics, Anticonvulsants, Antipsychotics | O Produce sleep |
|---|-----------------|

When not to pass medications.....

- **If you can't read the label.....** how could you do the rule of 3 and 5 if you can't read the label ?



- **If there is a change in status.....**call the nurse. This includes if a PRN medication is needed, and you don't have a protocol, as that is a change in status.



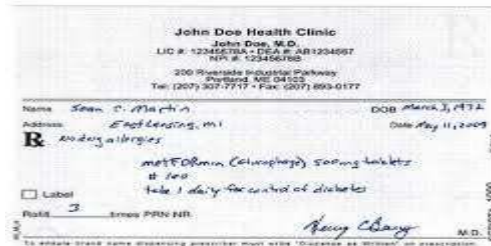
- **If the person refuses the meds.....**put them back in cabinet labeled. Then try in a bit to see if they will take them. When the end of the 1 hour window comes, notify RN if they have still refused for directions.



- **If any of the 5 rights are missing.....**all must be present to pass med.

Individual Time Drug Dose Site

- **If signed orders are not present.....**you need orders as they are your permission slip to give the medications



Remember don't.....

- **Replace a medication in a blister pack or bottle....** this is not allowed by med cert regulations and is a major risk potential



- **Give meds that you have not poured.....**if within the group home setting, if you are giving it then you must set it up. You may give meds that a nurse has poured for you.
- **Pour more than one person's meds at a time....** the CT State regulations do not allow this for med certified staff



- **Use one person's meds for another person.....**the reasons are the other person purchased it so it would be stealing, meds are only set up for the person identified per federal law, and you would not be able to do the rule of 3 and 5.

- **Falsify documentation**don't try to cover up an error. Contact RN for directions on how to address. The information that you report is critical for the care of those we help.

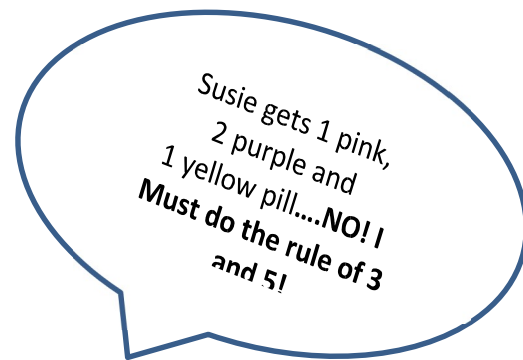


- **Remember don't.....**

- **Leave your keys unattended or the med cabinet open where others can then gain access to it.....**major safety issue as anyone could have access to the medications



- **Destroy meds in any other manner other than identified by your agency's policy.....**this must be done in a non-retrievable manner and 2 people must witness the destruction. Control meds must be destroyed by a licensed nurse.



- **Memorize medications.....**don't learn meds by saying they take 1 pink, 2 white and 1 purple pill. You must know the medications by name, use, effect, side effects and precautions.



Don't memorize. Know the actual med use, side effects, precautions, interactions!

LOA Leave of Absence

One Dose

When a person is going out on an LOA, and they only need **one dose**, it can be **packaged by med certified staff**. The **container or envelope** in which the medication is placed in must contain the **5 rights**. Remember, **dose refers to a time period number of given at a** **and not the medications** to be specific time.

Penny Lane
Depakote 250 mg
PO at 4 pm



When leaving for more than one dose period

There are 3 options for when people are leaving for more than one time period. Do one of the following:

- Get a prescription from the MD that the responsible person can fill.
- If given enough notice, see if the pharmacy could prepackage the meds for you.
- You may give the household supplies with instructions. (This means you send the original bubble packs, bottles or containers)



REMEMBER TO FILL OUT THE LOA PAPERWORK FOR YOUR AGENCY!!!

WHEN ERRORS OCCUR

When you become aware of a **med error**, **notify the nurse**, **UNLESS it is life threatening**. If it is **life threatening**, you would **call 911** and then notify the nurse/chain of command as soon as able.



The following are **examples only** of each level of med error.

The nurse makes the final determination depending on the circumstances.

Retraining will occur after each error as determined by the nurse & agency protocol.

Class A med errors: Failure to document, return the keys, reorder medications or document on the controlled sheet

Class B med errors: Any violation of the 5 rights (wrong person, time, drug, dose, site), taking a telephone/verbal order, omission of med due to it not being ordered.

Class C med errors: Any error resulting in hospitalization, serious injury or death; administration of med when certification has expired; falsification of records and/or certification paperwork.



Sanctions

- Any error(s) will result in progressive retraining and discipline.
- Agency policy will be followed for corrective action in the event a med cert staff makes more than 3 med errors during a one-month period.
- A RN may say you are not delegated to pass medications under them.

Measurements and Calculations

You are required to **know** these equivalents:
Remember: A cc and ml are exactly the same.

1 tsp = 5 cc/ml 1 Tbsp = 15 cc/ml 1 oz = 30 cc/ml

You have an order that reads:

Dilantin 500 mg PO TID. On hand you have Dilantin 250 mg/5cc. There are two ways you can get to the answer.

Method #1—

□ Divide what you want by what you have--- 500 divided by 250 would be 2. □ Multiply that number by what it took to reach each of the on hand doses. In this case you would multiple the 5 cc (what it took for each 250 mg) x2 to get the answer of 10 cc per dose.

$$\frac{500 \text{ mg}}{250 \text{ mg}} \times 5 \text{ cc} = 10 \text{ cc}$$

Method #2

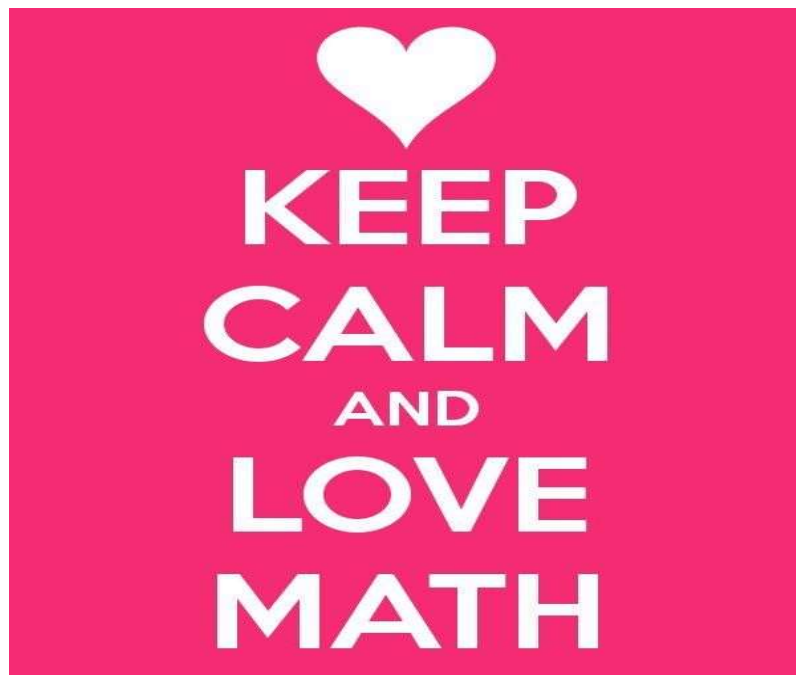
| Medication Dose | Quantity Required to make the dose (this could be cc/ml/tab/cap, etc.) |
|---|--|
| This is what you have on hand, and you keep adding till you reach the desired amount. | Each time you add a dose to the left column, you add the amount it took to get that dose in this column. When the left column reaches the dose you want, you add the quantities in this column to see how much of the item it will take) |
| 250 mg | 5 cc |
| + 250 mg | + 5cc |
| = 500 mg | Total cc's needed =10 cc (or ml) |

How much do you pour?

1. The prescriber orders 400 mg of Robitussin liquid. You have 200 mg/5cc on hand. How much do you pour? _____
2. The prescriber orders Depakote 1000 mg for a person. You have 250 mg tablets on hand. How many tabs do you pour? _____

3. The prescriber orders Lasix 60 mg. You have 20 mg / 5cc on hand.
How many cc's do you pour? _____
4. The prescriber orders Neurontin 300 mg. You have Neurontin 600
mg scored tablets on hand. How many tabs do you pour?

5. The prescriber orders MOM 30 cc to be given. How many TBSP
would that be? _____ How many ounces? _____ How many
tsp? _____
6. The prescriber orders Zoloft 120 mg for a person. You have Zoloft 20
mg /5cc. How many ml would you pour? _____



How much do you pour answers

1. The prescriber orders 400 mg of Robitussin liquid. You have 200 mg/5cc on hand. How much do you pour? **10 cc**
2. The prescriber orders Depakote 1000 mg for a person. You have 250 mg tablets on hand. How many tabs do you pour? **4 tabs**
3. The prescriber order Lasix 60 mg. You have 20 mg / 5cc on hand. How many cc's do you pour? **15cc**
4. The prescriber orders Neurontin 300 mg. You have Neurontin 600 mg scored tablets on hand. How many do you pour? **½ tab**
5. The prescriber orders MOM 30 cc to be given. How many TBSP would that be? **2 TBSP** How many ounces? **1 oz** How many tsp? **6 tsp.**
6. The prescriber orders Zoloft 120 mg for a person. You have Zoloft 20 mg /5cc. How many ml would you pour? **30 ml**