

**In the Know, Inc. Inservice Club  
presents  
A Client Safety Module:  
Understanding Medication Administration**

We hope you enjoy this Inservice, prepared especially for nursing assistants like you. You work very hard, and we appreciate the effort you make to complete these educational materials. It shows your desire to continue learning and growing in your profession.

After finishing this inservice, you will be able to:

- Discuss the importance of administering medications correctly.
- Name the five rights of medication administration.
- Describe at least four routes for administering medication.
- Discuss the difference between administering drugs and assisting a client with medications.
- Demonstrate your knowledge of safe medication administration in your daily work and in your documentation.



### **Instructions for the Learner**

If you are studying the inservice on your own, please:

- Read through all the attached materials. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that you feel is especially important.
- If you have questions about anything you read, please ask \_\_\_\_\_.
- Take the quiz. Think about each statement and circle the best answer.
- Check with your supervisor for the right answers. You pass the quiz with at least eight correct answers! Print your name, write in the date, and then sign your name.
- Keep the inservice information for yourself, and turn in the quiz page to \_\_\_\_\_ no later than \_\_\_\_\_.
- Show your Inservice Club Membership Card to \_\_\_\_\_ so that it can be initialed.

**THANK YOU!**

# In The Know

*The Inservice Club for Nursing Assistants*

**To be able to give a medication correctly and safely, you need to know the medication's:**

- **Name** (including the brand name and the generic name).
- **Purpose** (why the client is taking this particular drug).
- **Appearance** (such as a round, blue pill or a dark red liquid).
- **Dose** (such as 2 tablets, 500 mg or 4 ounces).
- **Route** (such as by mouth, per rectum or on the skin).
- **Frequency** (such as once a day, every four hours or at bedtime).
- **Common side effects** (such as drowsiness, nausea or fatigue).
- **Interactions** (including any foods or other drugs that should not be taken with this medication).

## Medication Administration

Medications are amazing! They can cure diseases, take away symptoms and improve people's health and quality of life. However, medications are also powerful chemicals that can have lasting effects on the body. It makes no difference if a medication is a prescription drug, an over-the-counter medicine, an herbal mixture or a homemade remedy. In a health care facility, it is still considered a medication...and no one should administer any of the above items to a client without the proper training.



Why are the rules so strict when it comes to medication administration? Keep in mind that medication errors can cause health care employees to lose their jobs, be named in lawsuits and even face jail time. *More importantly*, making mistakes while administering medications can harm, or even kill, clients.

Administering medications to clients is a serious and important responsibility that is usually performed by licensed nurses. However, some states allow nursing assistants to administer medication—if they have completed the required training program and they work in a health care facility under the supervision of a licensed nurse. (Home health aides may be allowed to assist with medications but they are *never* permitted to administer medications.)





Maybe you've already been certified as a medication aide...or maybe you just want to learn more about medications. Either way, keep reading to review the basic information about medication administration.

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**PLEASE NOTE:** This inservice does *not* take the place of any state's official medication administration training program.

## Interesting Information About Medications



- Seven out of every ten doctor visits involve some kind of prescription medication.
- In 1998, Americans bought over \$100 billion worth of prescription drugs! 
- In the United States, 125,000 people die every year because they fail to take their medications properly.
- Many elderly people have trouble taking their medications correctly. In fact, this problem accounts for 25% of all nursing home admissions.
- 60% of all people cannot identify their own medications!
- Nearly half of the people who take medications ignore the instructions about how they should take the drugs. 

- For every 100 medication prescriptions written by physicians, 33 of them are never filled. Of the 67 that are filled, only half of them are taken correctly!
- Taking medications improperly is as dangerous to people's health as many diseases.
- The average nursing home resident takes at least six different medications every day.
- Drugs to fight depression are taken by 36% of all nursing home residents.
- It costs an average of \$1000 per year to pay for the drugs needed by one nursing home resident.



- In an average American nursing home, at least 24 harmful medication errors will occur every year!
- Every new medication is named by the drug company that creates it. This is known as the brand name. For example, Tylenol is a brand name.

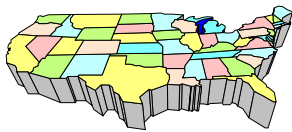
- When Tylenol was first invented by McNeil Laboratories in 1955, they were the only company allowed to sell it. This is because they had a *patent* on their invention. However, after a few years, the patent expired.



- Now, many different drug companies make and sell the same drug as Tylenol. However, they are *not* allowed to use the brand name. Instead, they use the generic name—acetaminophen.
- Both brand name and generic drugs must meet high standards set by the government. Some prescriptions can be filled with either the brand name or the generic version. It's up to the physician to decide which is better for each client.
- Generic medications are usually cheaper than brand name drugs. In fact, they are often *half* the price of the brand name version of the same drug!

# Regulations & Training For Medication Aides



- Every state has different regulations about who may administer medications to clients—and what type of training they need. Please note: Not all states allow unlicensed personnel to administer medications!



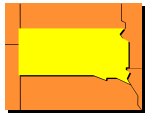
- Every workplace has its own rules about medication administration. Please note: Even if you are certified as a medication aide in your state, your workplace may not allow you to perform this duty.
- At least ten states have programs for nursing assistants to become medication aides. These states include:
  - Indiana
  - Iowa
  - Kansas
  - Maryland
  - Minnesota
  - Nebraska
  - Rhode Island
  - South Dakota
  - Texas
  - North Dakota

- Some states allow unlicensed personnel to assist with the medications for elderly people who live in rest homes...but not in nursing homes.

**Medication administration is complicated! It's not as simple as handing a client a couple of pills and a glass of water.**

- The training program required for certification as a medication aide is different in each state. *For example:*
  - In Texas, the program includes 100 hours of classroom study, 30 hours of lab work and 10 hours of clinical experience (at the student's place of employment). 
  - In Kansas, students are required to have 45 classroom hours and 15 hours of clinical experience. 

The Kansas program prepares students to administer oral and topical meds.

- In South Dakota, the program includes 16 hours of classroom instruction and 4 hours of clinical work. Students must pass every test by at least 85%. 

- Most medication administration programs require experience as a nursing assistant, a high school diploma and basic math skills.
- Learning about medications—and how to administer them— is *not* a “one time deal”. Every day, scientists discover new information about existing medications. They also work hard to develop new drugs.
- If you are responsible for administering medications to your clients, you'll need to keep your knowledge up-to-date by reviewing the current information regarding the safe and effective use of medications.

# The Five “Rights” of Medication Administration

Everyone who administers medications needs to memorize—and practice—the following five “rights”:

## **The Right Client**

As they pass out medications, nurses and medication aides need to make sure that they don't mix their clients up. For example:



- You may work with two clients who have the same last name.
- A confused client might lie down on someone else's bed or sit in someone else's room.
- You might even meet a *female* client named Johnny or a *male* client named Marion!

**REMEMBER!** Before giving medications to your clients, check their identity by looking at ID bracelets, viewing official photographs of your clients and calling your clients by name as you approach them.

## **The Right Medicine**

Let's face it. Mistakes can happen from the time that a physician writes an order for a medication until the time that the drug is



given to the client. Something as simple as messy handwriting on a prescription can cause a medication error. So, it's important to check that the drug you are about to give is the one that was actually ordered by the physician.

**REMEMBER!** Look at the written medication order and the label on the medication. Make sure they match.

## **The Right Dose**

Many medications come in different doses. It's up to the pharmacist to provide the correct amount of drug. For example, if a client needs 500 mg of medicine, the pharmacist can choose between *two* 250 mg pills or just *one* 500 mg pill. In addition, medication orders can change at any time. The dose your client received yesterday may not be the correct dose today.

**REMEMBER!** Be sure to check the dose on the written order with the actual dose supplied by the pharmacist. If you need to measure out the correct amount of a medication yourself, be sure you have the proper measuring tools.



## **The Right Route**

Frequently, it's possible to give the same medication in different ways. For example, Tylenol can be given by mouth or as a suppository inserted in the rectum. It's up to you to make sure you are about to give the medication in the way it was ordered by the physician.



**REMEMBER!** Check the written medication order to see how the drug should be given. If the order doesn't match what has been supplied by the pharmacist, check with your supervisor.

## **The Right Time**

Many health care facilities type up a medication schedule for each client. This is often called a Medication Administration Record (or MAR for short). The MAR specifies the time that each medication should be given. It's up to nurses and medication aides to stick to this schedule.

**REMEMBER!** To be effective, medications need to be given on time. Check the written order in the client's chart and/or in the MAR to make sure you are giving a drug at the correct time.



# Oral Medications

- Oral medications are given *by mouth*. They come in different forms including:
  - **Tablets**—dry, powdery pills, such as an aspirin tablet, that are meant to be swallowed or chewed.
  - **Capsules**—small containers made of gelatin that hold medication.
  - **Lozenges**—medicated discs, such as a cough drop, that are meant to dissolve in the mouth.



- **Elixirs**—liquids containing medications that are dissolved in alcohol or water.
- **Suspensions**—liquid medications that must be shaken before using.
- **Syrups**—liquids containing medications that are dissolved in sugar.

## Tips For Administering Oral Medications:

- Remember that not all tablets can safely be split, crushed or chewed. Some medications are covered with a special coating or are meant to dissolve slowly in the stomach. Before splitting a medication, be sure you have been ordered to do so...and that you have the proper tool to split the pill. (If you don't split it evenly, the client will not receive the correct dose.) If you are ordered to crush a medication, try crushing it before you take it out of the wrapper. If medications shouldn't be chewed, give your clients plenty of water to drink. Make sure they swallow the drug.
- Some liquid medications have an unpleasant taste. You may be able to disguise the taste by:
  - Mixing the drug in fruit juice or pouring it over ice. (But be sure to check with your supervisor and/or a pharmacist first. Some medications cannot be mixed with food or other liquids.)
  - Encouraging your client to sip the medication through a straw.
  - Telling the client to hold his nose while swallowing the drug.
  - Giving your client some ice chips to suck on prior to swallowing the medication.
  - Helping the client to gargle immediately after taking the drug.
- Be sure to measure liquid medications carefully using a special medication measuring cup or spoon. (A kitchen teaspoon or tablespoon will not provide an accurate dose of medication.) Remember that the dose cup that comes with an over-the-counter medication is meant to be used only with that specific drug. For example, the little plastic cup that comes with Pepto-Bismol should not be used to measure a dose of Nyquil.



# Topical Medications

- Topical medications are applied to the skin or mucous membranes and are never taken internally. They come in different forms, including:
  - **Ointments**—creams or pastes that contain medication.
  - **Transdermal Discs or Patches**—small strips (similar to Band-Aids) that are applied to the skin and allow medication to be absorbed slowly over time.
  - **Sprays**—aerosol cans or pump bottles filled with medication that is meant to be sprayed on the skin.
  - **Powders**—dry medication mixed with talc or other powder.



## Tips For Administering Topical Medications:

- When applying a topical powder, shake the powder onto your hand first—keeping your hand away from the client's face. Then, apply the powder gently as ordered. This keeps the client from breathing in any loose powder.



- Wear gloves when you apply an ointment so that you don't absorb the drug through your own skin—and so that you don't pass germs to the client.
  - Be careful not to put too much pressure on the skin when applying a topical medication. The client's skin may be tender and/or delicate.
- Read the directions for applying each specific topical medication. Many of them are meant to be applied in a thin layer. If you apply too much, it can cause skin irritation and discomfort.
- If you are ordered to apply an ointment to your client's mucous membranes, make sure to put it on thinly. The mucous membranes (such as the inside of the nose and mouth) are usually moist and absorb ointments more quickly than skin.
- Some topical medications need to be covered up with a dry dressing. Make sure that your workplace policies allow you to perform this kind of dressing change.
  - Remember that for your clients, herbal remedies like peppermint oil, aloe vera gel and lavender oil are considered medications. Don't apply *anything* to your client's skin without permission from your supervisor.

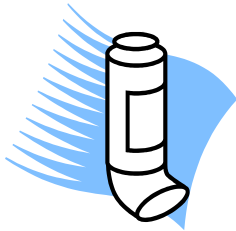


**Depending on the laws in your state, medication aides may be restricted to administering *oral* and *topical* medications!**

## Other Ways to Give Medications

There are a number of other “routes” for giving drugs to clients. Medication aides may or may not be allowed to administer medications by these routes. They include:

**Inhaled medications** are breathed directly into the lungs. They often come in a handheld inhaler or a nebulizer. People with lung diseases like asthma or COPD often take inhaled drugs.



**Droplet medications** are liquids meant to be inserted with a dropper into the eyes or ears.



**Rectal medications** are mixed with a solid substance and formed into a suppository which is inserted into the rectum. They are useful for clients who can’t swallow or who suffer from nausea.

**Vaginal medications** may also be in the form of a suppository which is meant to slowly melt inside the vagina. They may also be creams or ointments.

**Injectable medications** may be given by a shallow injection just under the skin (such as an insulin shot) or by a deeper injection into the muscle.

**Intravenous medications** are mixed in a bag with IV fluid and dripped slowly into the body through an IV or they are injected directly into the client’s IV tubing. These medications take effect in the body very quickly.



### What Does It Mean To ASSIST a Client With Medications?






*Assisting clients with their medications means helping them take their own medicines. Here are some of the ways that nursing aides may assist clients with medications:*

- Check medication care plans to make sure your clients are taking the right drug in the right way at the right time.
- Remind clients when it’s time to take their medications.
- Bring medication bottles, pre-poured medication containers or pre-filled syringes to clients.
- Read a medication label to a client.
- Loosen and/or remove the tops of medication bottles.
- Provide clients with a glass of water or other liquid.
- Watch clients as they pour out their medications (so they don’t get too much or too little).
- Hold a client’s hand steady while he or she pours a liquid medication or inserts eye drops.
- Check to make sure your clients swallow their medications.
- Put medications away after clients are done with them.
- Document your observations about the medications you’ve seen clients take and how they reacted to them.






**When *assisting* a client with medications, remember that you are not allowed to pour out any medications (solid or liquid) or actually place a medication in a client’s mouth.**




# Tips For Safe Medication Administration

- Never forget the “five rights” of medication administration. Even if you work with the same client every day, you still need to go through the steps. Do you have the right *client*, the right *medication*, the right *dose*, the right *route* and the right *time*? 
- Don't be afraid to question a medication at any point. If you have a “gut feeling” that you're giving the wrong drug, check it out. You may be right! Talk to your supervisor if you have any doubts about a particular medication.
- If a medication looks different to you—such as its size, shape or color—check with your supervisor before giving the drug to your client. Likewise, pay attention if a client tells you that a medication looks different than usual.
- To provide the best care to your clients, learn as much as you can about their illnesses and their medications. 
- Remember that if you feel especially busy or distracted at work, you are more likely to make a medication error. So, take your time when administering medications! *Think about it this way:* Would you rather be known as someone who is a little slow or as someone who hurt or killed a client because of a medication error?
- Keep a current drug reference book handy. (Look for one that has photographs of every medication.) 
- Always check each client's chart for any allergies.
- Be sure to check the *expiration dates* on any medications—before you give them. Notify your supervisor of any expired medications.
- Pay attention to how your client's medications are stored. Remember that many medications lose their effectiveness when exposed to sunlight, heat or humidity.
- Always leave medications in their original containers so that they can be identified by the label on the container. 
- Never give medication meant for one client to someone else!
- Make sure you have enough light to see your client's face and/or ID bracelet—as well as the medication label. Never *guess* or *assume* that you are giving the correct drug to the correct client.
- Teach your clients to stop any medication aide or nurse who doesn't check their identity before giving them a medication.
- Don't assume that just because you gave a particular medication to a client yesterday, that you'll give the same medication today! Medication orders can change frequently, so check the current written order before giving a medication. 

## Medication Safety Tips

- If you have to convert dosage measurements, make sure you are making the correct calculation. For example, if the medication label lists doses in *tablespoons* but you have a medication spoon that only measures *ounces*, make sure you know how to “do the math”. Ask for help from your supervisor or a pharmacist, if necessary.
 
- Keep in mind that over-the-counter medications must not be given to a client unless there is a written order from a physician. Common OTC drugs include:
  - Laxatives
  - Vitamins
  - Cold medicines
  - Aspirin
  - Cough medicine
  - Allergy medicine
  - Antacids
- Never try to *force* a client to take a medication—even if it’s for his own good. Every client has the right to refuse to take a medication. Notify your supervisor immediately if this happens.
- Remember that herbal products and vitamins are also considered medications—even though they are sold without a prescription at drug and grocery stores. Herbs and vitamins can:
 
  - Interact with other medications that your clients are taking.
  - Cause unpleasant (or dangerous) side effects.
  - Contain *contaminated* ingredients (since herbs and vitamins are not regulated by the United States Food & Drug Administration).
- Remember that some medications lose their effectiveness when mixed with certain foods. For example, your client may need to avoid caffeine, alcohol or milk while taking a certain medication.
 
- Some drugs also come with *warnings* against certain activities—such as smoking or driving. Be sure you are aware of any activities that your client needs to avoid.
- Keep these real life errors in mind as you administer medications to your clients:
  - Toxic substances (like super glue) have been placed in clients’ eyes instead of eye drops because the wrong container was picked up. Avoid this error by keeping non-medication items away from medications.
  - Medication patches have been taped to the skin—instead of peeling off the backing and applying the patch like a Band-Aid. (With the backing still on, the medication can’t work!) Avoid this error by making sure you know how to apply any topical medication.
  - Suppositories have been inserted in the rectum with the foil wrapping still on. Avoid this error by removing all packaging before administering any medication.
  - Suppositories have also been eaten by clients. Avoid this error by never leaving medications at a client’s bedside—even for a few minutes.

## Medication Safety Tips

- Never administer a medication from an unmarked container or package—even if you think you recognize the medication. 
- Be sure to report all medication errors! Remember, by reporting errors you may:
  - Be able to counteract any negative side effects caused by your mistake.
  - Help others learn from your mistake—so they don't do the same thing.
  - Assist your workplace to find new ways to make medication administration safer.
- Learn the most common side effects of a medication by referring to a drug reference handbook. Try carrying a *pocket-sized* drug book with you as you work.
- Remember that elderly people have a higher risk of side effects. This is because:
  - Their bodies don't process medications as well as they did when they were younger.
  - Many older people take a number of different medications. The more medications that people take, the more likely they are to have serious side effects.
- If you notice that your client is experiencing *itching, swelling or trouble breathing* after you've administered a medication, get help right away! These symptoms could indicate a life-threatening reaction to the medication.
- If there are pharmacists employed at your workplace, don't forget that they are excellent resources for information about medications. The nurses at your workplace can also help you learn more about the specific medications you are administering. 

### Tools to Help Clients Who Administer Their Own Medications

There are both simple and "high tech" tools to help people take their medications correctly. These special tools include:

- **Pill organizers.** These flip-top containers come in daily or weekly versions. They are marked with the time and/or the day of the week. Braille versions are also available for people with impaired vision. Pill organizers come in inexpensive plastic styles and expensive "computerized" versions that beep when it's time to take a dose.
- **Special bottle caps.** There is a new kind of prescription bottle cap that "counts" how many times the bottle has been opened. This helps people know if they have taken the required number of daily doses.
- **"Talking" medication labels.** A special hand-held device scans the prescription label and "reads" the information out loud.
- **Wristwatches.** Certain watches have alarms that can be set to go off when it's time to take a medication.
- **Automatic dispensers.** These are fancy medication organizers that "spit out" the correct dose of a medication at the proper time.

# Documenting Medication Administration

Every workplace has its own system for documenting the administration of medications. Be sure you follow the documentation policies and procedures for your facility. Here are some additional tips to help you document:



- Be sure you document something about every medication dose for which you are responsible. Was the dose given on time? Was it late or skipped? If so, why?
- Document any problems with the medication that kept you from administering it. For example: *“the pill was discolored”, “the capsule was broken” or “the medication had a strange odor”*. Document what you did about the situation. For example: *“ordered replacement medication from the pharmacy” or “notified supervisor at 3:00p.m. She said she will get replacement dose”*.
- Describe anything unusual, such as:
  - The client had difficulty swallowing a medication.
  - The client asked you questions about a medication that you couldn’t answer.
  - You made an error while administering the medication. (This may require an incident report. Check with your supervisor.)
  - The client refused to take a scheduled medication.
  - You noticed problems that may be side effects of a medication, such as nausea, diarrhea, flushing, headache, dizziness, etc.
  - You spot the client taking medications that were not ordered by the physician, such as cough drops, aspirin or antacids.
- Be sure to document your client’s vital signs, if ordered. A change in the client’s vital signs may be an important sign that a medication is *working*—or it may be a side effect that requires medical attention.
- Don’t forget to document if clients seem improved or if they tell you they are feeling *better* in some way. For example: *“improved appetite; ate 75% of lunch meal” or “client reports headaches have stopped”*. Your observations help the doctors and nurses know if a medication is working.
- If you use abbreviations in your documentation, be sure they are approved by your workplace. Be careful to use the correct abbreviation. Here are a few common medication abbreviations:

<b>q.d.</b> means <b>every day</b>	<b>q.o.d.</b> means <b>every other day</b>
<b>q2hr</b> means <b>every two hours</b>	<b>b.i.d.</b> means <b>twice a day</b>
<b>t.i.d.</b> means <b>three times a day</b>	<b>p.r.n.</b> means <b>as necessary</b>
<b>STAT</b> means <b>immediately</b>	<b>P.O.</b> means <b>by mouth</b>
<b>D/C</b> means <b>discontinue</b>	<b>a.c.</b> means <b>before meals</b>
<b>tab</b> means <b>tablet</b>	<b>p.c.</b> means <b>after meals</b>
<b>cap</b> means <b>capsule</b>	<b>mg</b> means <b>milligram</b>

# Are You "In the Know" About Medication Administration?



**Circle the best choice and then check your answers with your supervisor!**

**1. To make sure you are giving a medication to the right client, you should:**

- A. Check the client's chart.
- B. Ask the client's roommate to identify the client.
- C. Ask a coworker to tell you what the client looks like.
- D. Check the client's ID bracelet or official photograph.

**2. True or False**

Nursing assistants in every state are allowed to administer over-the-counter medications to their clients.

**3. If a physician orders your client to receive a medication t.i.d., you should administer it:**

- A. On Tuesdays and Thursdays.
- B. Three times a week.
- C. Three times a day.
- D. Two times a day.

**4. True or False**

Whenever a client has trouble swallowing a large tablet, you should cut it into several smaller pieces.

**5. If you are ordered to assist a client with his medications, you may:**

- A. Count out his pills for him.
- B. Remove the lid from his medication bottle.
- C. Put eye drops in his eyes.
- D. Give him his insulin injection.

**6. Medication errors:**

- A. Should always be reported.
- B. Are very rare.
- C. Happen most often during the night shift.
- D. Are usually caused by pharmacists.

**7. True or False**

Before administering a medication, you should document the time you plan to give it to the client.

**8. True or False**

Every client has the right to refuse a medication.

**9. True or False**

Medication aides should know the common side effects of the drugs they give to their clients.

**10. True or False**

An elixir is a topical medication that is meant to be rubbed into the skin.

EMPLOYEE NAME \_\_\_\_\_

DATE \_\_\_\_\_

***I understand the information presented in this inservice. I have completed this inservice and answered at least eight of the test questions correctly.***

Employee Signature \_\_\_\_\_

Inservice Credit: 60 minutes

Supervisor Signature \_\_\_\_\_

Self Study \_\_\_\_\_

*File completed test in employee's personnel file.*

Group Study \_\_\_\_\_