



# MEDICATION ADMINISTRATION BASICS

The purpose of this section is to help learners understand the basics of medication administration and their responsibility in implementing a safe medication administration system.

## **KEY TERMS:**

- Medication errors
- Prescription drugs
- Over-the-counter (OTC) drugs
- Medication routes
- Food and drug interactions
- Side effects

## **OBJECTIVES:**

After completing this section the learner will be able to:

- Describe the types of medication errors;
- List the medication routes;
- Demonstrate how to read a prescription label;
- Demonstrate how to read OTC drug label;
- Understand how foods can interact with drugs;
- Give examples of types of side effects that can occur with medications.



# MEDICATION ADMINISTRATION

## INTRODUCTION

Administering medication involves more than giving residents their medications. Handing out a pill is just a small part of the process. The AFH rules require that AFH owners and their caregivers are able to demonstrate an understanding of each resident's medication administration schedule, the reason the resident is taking the medication, the effect of the medication and any potential side effects.

When you are caring for up to five residents who may be taking as many as 10-15 different medications (including over-the-counter), the task of administering medications becomes complex.

The AFH provider is responsible for implementing and maintaining a safe medication administration process for all residents. Making sure you and your caregivers are well trained in proper medication administration will reduce the potential for medication errors. **Note: Be sure substitute caregivers are well trained in safe medication administration.**

Medication errors are a common problem. A recent study estimated that, in one year, incorrect use of medications resulted in more than 9 million hospital admissions and more than 18 million emergency room visits.<sup>1</sup>

Listed below are a few examples of common medication errors:

- Giving the medication at the wrong time;
- Not giving a scheduled medication;
- Giving an incorrect dose;
- Giving a medication that has been discontinued;

- Giving a resident medication intended for someone else;
- Improperly stored medication;
- Missing or incomplete documentation.

You are the first line of defense for the residents in your care. Understanding and implementing safe medication administration and keeping accurate records is an important responsibility of the AFH provider.

A medication administration process includes:

- Obtaining medical orders;
- Transcribing medical orders on to the medication administration record (MAR);
- Verifying medical orders against the MAR;
- Dispensing and delivering/administering;
- Monitoring and documenting;
- Storing; and
- Disposing of discontinued, unused, contaminated or expired medication.

Be sure you and your staff understand the orders and can perform the tasks required to dispense the medications. If you or your caregivers need training, you must get that training before giving the medication. Tasks such as taking a pulse may need to be performed before giving a medication. Checking a pulse or blood pressure (BP) before giving a medication is common in AFH.

Medication administration is part of every AFH's daily responsibilities. It is important to routinely work with health care professionals to ensure safe and effective medication use by residents. **The individual's primary health care practitioner, prescribing practitioner, registered nurse and pharmacist are all part of a team of health care professionals that can help you with the medications that have been prescribed to a resident living in your home.** Be sure to

talk with them about your concerns or questions each time a medication is ordered or refilled.

A prescribing practitioner can be any health care practitioner with the authority to prescribe treatment or medications who is involved with the care of the resident. In addition to the resident's primary health care practitioner, other prescribing practitioners may include a dentist, podiatrist, specialist, psychiatrist or urgent care or emergency room physician or nurse practitioner.

## BASICS OF MEDICATIONS

This section will review types of medications, how medications are delivered (routes), how to read prescription and over-the-counter labels, drug interactions, side effects and other information about medication use.

## MEDICATION CATEGORIES

Medications can be categorized into groups by the way they are marketed or sold. The most common categories are drugs that require a prescription and drugs that can be purchased over-the-counter.

- **Prescription drugs** are medications obtained from a pharmacist by written order from a prescribing practitioner. They are also referred to as prescribed drugs.
- **Over-the-counter (OTC) drugs** are widely advertised and can be purchased by anyone without a prescription. **OTC medications can cause serious side effects used alone or when combined inappropriately with each other or with prescribed medication.**

» Common problems caused by OTC medications:

- They may change the effect of prescribed medications, for example, making them stronger or less effective. As a result, the doctor may mistakenly increase/decrease the dose of the prescribed medication.
- The medications may mask symptoms of disease. For example, antacids taken for upset stomach may cover up warning symptoms of ulcer disease, which could delay diagnosis and treatment.
- They could act similarly to a prescribed medication. Combined, the medications may lead to drug overdose symptoms.
- The medications could interact with other OTC and prescribed medications.
- They may create unwanted side effects.

Prescription and over-the-counter drugs are either sold as generic or brand-name drugs. Generic medications are sold using a common name, instead of by a brand name. Aspirin is a common term (generic) used for acetylsalicylic acid, which is the name of the chemicals used. Bayer® is a brand name for aspirin. Achromycin® is the brand name for the antibiotic tetracycline (generic). Generic drugs usually cost less and can be requested from the pharmacist. However, a resident's prescribing practitioner may not approve a generic substitution because some generic drugs vary in their chemical properties.

A drug may be classified by the chemical type of the active ingredient or by the way it is used to treat a particular condition. Each drug can be classified into one or more drug classes. Common drug classifications include cardiovascular, respiratory, urinary, gastrointestinal, endocrine, antipsychotic, anti-anxiety and analgesics.

## HOW TO READ A PRESCRIPTION LABEL

Important in-depth information is available on the prescription label. Each prescription label contains the same information, which is highlighted in the example below. However, the format or design of the label may look different.

### Prescription label\*

The diagram shows a prescription label with the following text and callouts:

- Pharmacy name and address:** Local Pharmacy, 123 MAIN STREET, ANYTOWN, USA 11111
- Drugstore phone number:** (800) 555-5555
- Doctor's name:** DR. C. JONES
- Prescription fill date:** DATE 06/23/09
- Number used by the drugstore to identify this drug for your refills:** NO 0060023-08291
- Person who gets this drug:** JANE SMITH, 456 MAIN STREET ANYTOWN, US 11111
- Instructions about how often and when to take this drug:** TAKE ONE CAPSULE BY MOUTH THREE TIMES DAILY FOR 10 DAYS UNTIL ALL TAKEN
- Name of drug and strength of drug:** AMOXICILLIN 500MG CAPSULES
- Number of refills before certain date:** QTY MRG, NO REFILLS - DR. AUTHORIZATION REQUIRED, USE BEFORE 06/23/12, SLF/SLF
- Don't use this drug past this date:** USE BEFORE 06/23/12

\*[www.womenshealth.gov/aging/drugs-alternative-medicine/how-to-read-drug-labels.cfm](http://www.womenshealth.gov/aging/drugs-alternative-medicine/how-to-read-drug-labels.cfm)

# HOW TO READ AN OTC LABEL

Each OTC medication has a drug fact label on the bottle. Below is an example of the information found on a drug fact label for OTC medications:

## OTC drug fact label\*

### Drug Facts

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**Active ingredient (in each tablet)**    **Purpose**  
 Chlorpheniramine maleate 2 mg . . . . . Antihistamine

**Uses** temporarily relieves these symptoms due to hay fever or other upper respiratory allergies:  
 ■ sneezing    ■ runny nose    ■ itchy, watery eyes  
 ■ itchy throat

**Warnings**  
**Ask a doctor before use if you have**  
 ■ glaucoma  
 ■ a breathing problem such as emphysema or chronic bronchitis  
 ■ trouble urinating due to an enlarged prostate gland

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**Ask a doctor or pharmacist before use if you are taking** tranquilizers or sedatives

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**When using this product**  
 ■ You may get drowsy    ■ Avoid alcoholic drinks  
 ■ Alcohol, sedatives, and tranquilizers may increase drowsiness  
 ■ Be careful when driving a motor vehicle or operating machinery  
 ■ Excitability may occur, especially in children

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**If pregnant or breastfeeding**, ask a health professional before use.  
**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

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**Directions**

Adults and children 12 years and over	Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours
Children 6 years to under 12 years	Take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours
Children under 6 years	Ask a doctor

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**Other information** Store at 20-25° C (68-77° F)  
 ■ Protect from excessive moisture

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**Inactive ingredients** D&C yellow no. 10, lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch

Therapeutic substance in drug

When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects

More information on how to store the drug

Product type

Symptoms or diseases the drug treats

Read carefully: how much to take, how often to take it, and when to stop taking it

Other things in the drug, such as colors or flavorings

\*[www.womenshealth.gov/aging/drugs-alternative-medicine/how-to-read-drug-labels.cfm](http://www.womenshealth.gov/aging/drugs-alternative-medicine/how-to-read-drug-labels.cfm)



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## MEDICATION ROUTES

Medication can be introduced into the body through many routes. The prescribing practitioner will write one of the following routes for the medication to be given:

- G-tube/j-tube;
- Intramuscular (IM) injection\*;
- Intravenous (IV)\*;
- Nasal (drops or inhalers);
- Ophthalmic (eye);
- Oral (taken by mouth);
- Otic (ear);
- Rectal;
- Subcutaneous injections (requires an RN to delegate);
- Sublingual (under the tongue);
- Transdermal (via skin);
- Vaginal.

*\*An AFH provider or caregiver cannot administer intramuscular and intravenous medications. A nurse or other qualified health professional must give them.*

AFH providers are expected to correctly administer all medications, except for IM or IV medications, to the resident regardless of route. OAR Chapter 851 Division 47 (Oregon Board of Nursing) prohibits RNs from delegating IM medications. Additionally, OAR Chapter 411 Division 50 (AFH rules) prohibits the delegation of IV medications. IM and IV medications must be administered by a nurse or other qualified health professional.

Subcutaneous medication, for example insulin, can only be administered by the AFH provider or caregivers after an RN has provided appropriate training and



completed the delegation process. Refer to the section on RN delegation found in Chapter 3 for additional information.

If a resident has a medication ordered to be administered through the IM or IV route, administration arrangements must be made with a licensed practitioner. Several options are available to assure residents receive their IM or IV medication:

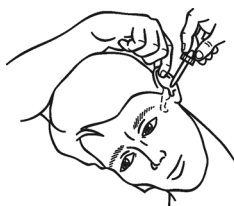
- Make arrangements with the resident's primary health care practitioner;
- Request a referral to a home health agency or, if the resident is on hospice, make arrangements with the hospice agency; or
- Contract with a private nurse to perform the task.

The guidelines on the following pages provide basic information on how to administer certain types of non-oral medications. If you are unsure or have any questions about how to administer any medication, contact the pharmacist or your consulting RN for assistance. Improper medication administration is considered a medication error.

**Source:** – APhA Special Report: Medication Administration Problem Solving in Ambulatory Care. Washington, DC: American Pharmaceutical Association; 1994-9.e.

### Guidelines for administering eardrops

1. Wash your hands with soap and warm water; then dry them thoroughly.
2. Carefully wash and dry the outside of the ear, taking care not to get water in the ear canal.
3. Warm eardrops to body temperature by holding the container in the palm of your hand for a few minutes. Do not warm the container in hot water. Hot eardrops can cause ear pain, nausea, and dizziness.
4. If the label indicates, shake the container.
5. Tilt your head (or have the patient tilt his or her head) to the side as shown in drawing A. Or lie down with the affected ear up as shown in drawing B. Use gentle restraint, if necessary, for an infant or a young child.



A



B

6. Open the container carefully. Position the dropper tip near, but not inside, the ear canal opening. Do not allow the dropper to touch the ear, because it could become contaminated or injure the ear. Eardrops must be kept clean.
7. Pull your ear (or the patient's ear) backward and upward to open the ear canal as shown in drawing A. If the patient is a child younger than 3 years old, pull the ear backward and downward as shown in drawing B.
8. Place the proper dose or number of drops into the ear canal. Replace the cap on the container.
9. Gently press the small, flat skin flap (tragus) over the ear canal opening to force out air bubbles and push the drops down the ear canal.
10. Stay (or keep the patient) in the same position for the length of time indicated in the product instructions. If the patient is a child who cannot stay still, the doctor may tell you to place a clean piece of cotton gently into the child's ear to prevent the medication from draining out. Use a piece large enough to remove easily, and do not leave it in the ear longer than an hour.
11. Repeat the procedure for the other ear, if needed.
12. Gently wipe excess medication off the outside of the ear, using caution to avoid getting moisture in the ear canal.
13. Wash your hands.

Source: APhA Special Report: Medication Administration Problem Solving in Ambulatory Care. Washington, DC: American Pharmaceutical Association; 1994:9.

### Guidelines for administering nasal drugs

#### Nasal Sprays

- Gently insert the bottle tip into one nostril as shown in drawing A.
- Keep head upright. Sniff deeply while squeezing the bottle. Repeat with other nostril.



A

#### Pump Nasal Sprays

- Prime the pump before using the first time. Hold the bottle with the nozzle between the first two fingers and thumb on the bottom of the bottle.
- Tilt the head forward.
- Gently insert the nozzle tip into one nostril as shown in drawing B. Sniff deeply while depressing the pump once.
- Repeat with other nostril.



B

#### Nasal Inhalers

- Warm the inhaler in hand just before use.
- Gently insert the inhaler tip into one nostril as shown in drawing C. Sniff deeply while inhaling.
- Repeat with other nostril.
- Wipe the inhaler after each use. Make sure the cap is tightly in place between uses. Discard after 2-3 months even if the inhaler still smells medicinal.



C

#### Nasal Drops

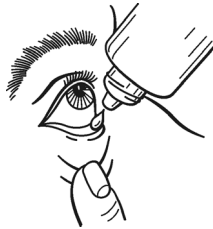
- Squeeze the bulb to withdraw medication from the bottle.
- Lie on bed with head tilted back over the side of the bed as shown in drawing D.
- Place the recommended number of drops into one nostril. Gently tilt head from side to side.
- Repeat with other nostril. Lie on bed for a couple of minutes after placing drops in the nose.
- Do not rinse the dropper.



D

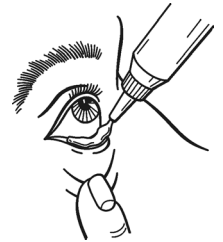
### Guidelines for administering eye drops

1. If you have difficulty telling whether eye drops touch the eye surface, refrigerate the solution before instilling it. Do not refrigerate suspensions.
2. Wash hands thoroughly. Wash areas of the face around the eyes. Contact lenses should be removed unless the product is designed specifically for use with contact lenses.
3. Tilt head back.
4. Gently grasp lower outer eyelid below lashes, and pull eyelid away from eye to create a pouch.
5. Place dropper over eye by looking directly at it as shown in the drawing.
6. Just before applying a single drop, look up.
7. As soon as the drop is applied, release the eyelid slowly. Close eyes gently for 3 minutes by placing your head down as though looking at the floor (using gravity to pull the drop onto the cornea). Minimize blinking or squeezing the eyelid.
8. Use a finger to put gentle pressure over the opening of the tear duct.
9. Blot excessive solution from around the eye.
10. If multiple drop therapy is indicated, wait at least 5 minutes before instilling the next drop. This pause helps ensure that the first drop is not flushed away by the second, or that the second drop is not diluted by the first.
11. If using a suspension, place that drop in last.
12. If both drop and ointment therapy are indicated, instill the drops at least 10 minutes before the ointment so the ointment does not become a barrier to the drops' penetrating the tear film or cornea.



### Guidelines for administering eye ointments

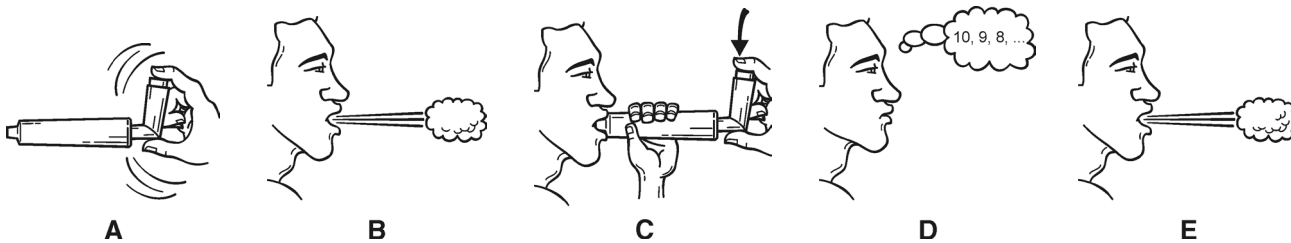
1. Wash hands thoroughly. Wash areas of the face around the eyes.
2. If both drop and ointment therapy are indicated, instill the drops at least 10 minutes before the ointment so that the ointment does not become a barrier to the drops' penetrating the tear film or cornea.
3. Tilt head back.
4. Gently grasp lower outer eyelid below lashes, and pull eyelid away from eye as shown in the drawing.
5. Place ointment tube over eye by looking directly at it.
6. With a sweeping motion, place 1/4 to 1/2 in. of ointment inside the lower eyelid by gently squeezing the tube, but avoid touching the tube tip to any tissue surface.
7. Release the eyelid slowly.
8. Close eyes gently for 1 to 2 minutes.
9. Blot excessive ointment from around the eye.
10. Vision may be temporarily blurred. Avoid activities requiring good visual ability until vision clears.



## Guidelines for using MDIs

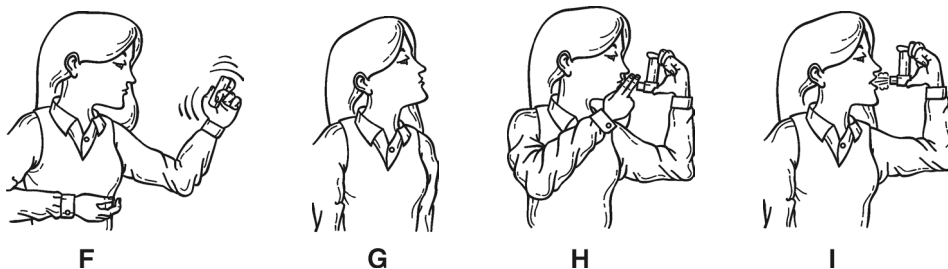
### Closed-mouth Technique

1. Remove dust cap from inhaler. Attach inhaler to spacer/holding chamber if you have one. Shake the inhaler well as shown in drawing A.
2. Blow out all the air in your lungs (see drawing B).
3. Seal lips tightly around the mouthpiece. As you breathe in slowly, press down on the inhaler to release the medicine until your lungs are full (see drawing C).
4. Hold your breath for 10 seconds to allow the medicine to reach deeply into your lungs (see drawing D).
5. Blow out the air in your lungs (see drawing E).



### Open-mouth Technique

1. Take off the cap. Shake the inhaler as shown in drawing F.
2. Stand up and tilt your head back a little (see drawing G).
3. Place your hand between your mouth and the inhaler as shown in drawing H to measure how far away the inhaler should be from your mouth.
4. Take a cleansing breath; in and out.
5. Open your mouth wide; start to breathe in slowly; push down on the inhaler; while continuing to breathe in (see drawing I).
6. Hold your breath; count to 10; then breathe out.
7. If your asthma care plan instructs you to use 2 puffs, wait 1 minute and repeat steps 1-6.



## Administration of rectal suppositories or enemas

### Enemas

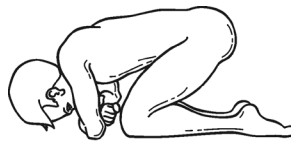
1. If someone else is administering the enema, lie on your left side with knees bent or in the knee-to-chest position (see drawings A and B). Position A is preferred for children older than 2 years. If self-administering the enema, lie on your back with your knees bent and buttocks raised (see drawing C). A pillow may be placed under the buttocks.
2. If using a concentrated enema solution, dilute solution according to the product instructions. Prepare 1 pint (500 mL) for adults and 1/2 pint (250 mL) for children.
3. Lubricate the enema tip with petroleum jelly or other nonmedicated ointment/cream. Apply the lubricant to the anal area as well.
4. Gently insert the enema tip 2 (recommended depth for children) to 3 in. into the rectum.
5. Allow the solution to flow into the rectum slowly. If you experience discomfort, the flow is probably too fast.
6. Retain the enema solution until definite lower abdominal cramping is felt. The parent/caregiver may have to gently hold a child's buttocks closed to prevent the solution from being expelled too soon.

### Suppositories

1. Gently squeeze the suppository to determine if it is firm enough to insert. Chill a soft suppository by placing it in the refrigerator for a few minutes or by running it under cool running water.
2. Remove the suppository from its wrapping.
3. Dip the suppository for a few seconds in lukewarm water to soften the exterior.
4. Lie on your left side with knees bent or in the knee-to-chest position (see drawings A and B). Position A is best for self-administration of a suppository. Small children can be held in a crawling position.
5. Relax the buttock just before inserting the suppository to ease insertion. Gently insert the tapered end of the suppository high into the rectum. If the suppository slips out, it was not inserted past the anal sphincter (the muscle that keeps the rectum closed).
6. Continue to lie down for a few minutes and hold the buttocks together to allow the suppository to dissolve in the rectum. The parent/caregiver may have to gently hold a child's buttocks closed.
7. Remember that the medication is most effective when the bowel is empty. Try to avoid a bowel movement after insertion of the suppository for up to 1 hour so that the intended action can occur.



A



B



C

## DRUG INTERACTIONS

A **drug interaction** occurs when a drug interacts with other drugs and/or certain foods to produce side effects. Knowledge of drug interactions, as well as adverse reactions, for each medication taken by a resident can help prevent problems.

One medication may interact with another by increasing, decreasing or altering the other's intended action, or combining to create a different side effect. For example, antacids decrease absorption of the heart drug Lanoxin<sup>®</sup>. Using the same pharmacist whenever a resident's prescriptions are filled can help prevent problems related to drug/drug interaction. Consult the pharmacist, RN, physician or nurse practitioner about all medications the resident takes (OAR 411-050-0447 (4)(b)). Over-the-counter medications, such as antacids, can cause serious drug interactions with other medications.

**Food/drug interactions.** Certain foods interfere with the action of certain drugs. For example, the calcium in milk makes tetracycline ineffective. Serious side effects develop if people taking certain antidepressant drugs (MAO inhibitors) eat aged cheese, sour cream, cabbage or red wine.

**Drug/food Interactions.** Some medications interfere with the body's use of certain nutrients, which can complicate health problems in the elderly. For example, mineral oil decreases absorption of fat-soluble vitamins.

### Side effects

All medications have potential unintended actions called side effects. One person may experience a side effect of a drug; another person taking the same drug may not. Side effects, when experienced, are commonly referred to as adverse reactions. Adverse reactions can be expected or unexpected; mild, serious or severe. For example:

- Mild, expected: Metamucil® (used for constipation) may cause the feeling of abdominal fullness.
- Severe, unexpected: Effect may be a life-threatening allergic reaction to penicillin taken for an infection.

Adverse reactions include:

- Changes in cognitive functioning: hallucinations, confusion, delirium, memory loss, impaired thinking or persistent drowsiness. The medications most commonly involved are:
  - » Barbiturates (sedatives);
  - » Cold remedies;
  - » Sleeping pills;
  - » Pain killers;
  - » Tranquilizers;

- » Ulcer medications;
  - » Heart medications;
  - » Steroids;
  - » Blood pressure medications;
  - » Antibiotics;
  - » Muscle relaxants.
- Parkinson's-like symptoms: Symptoms may be found in patients who do not have Parkinson's disease, but have the same symptoms such as uncontrollable movements of the face, arms and legs; dizziness on standing; or falls. Symptoms may be caused by various medications, for example, those used to control problem behaviors and high blood pressure
  - Gastrointestinal problems: Nausea, bleeding, vomiting, constipation, diarrhea, abdominal pain. Medications used to treat the following medical conditions commonly cause gastrointestinal problems:
    - » Arthritis;
    - » Asthma;
    - » Depression;
    - » Ulcers;
    - » Pain.
  - Urinary tract problems: Difficulty urinating, loss of bladder control. Medications used to treat the following medical problems often affect the urinary tract:
    - » Depression;
    - » Colds;
    - » Allergies;



- » Eye problems;
  - » Sleeplessness;
  - » Anxiety.
- Visual problems (for example, blurred vision)
  - Breathing difficulty
  - Headache, itching skin, skin rash or anticholinergic effects that occur suddenly or are symptoms the resident has not had in the recent past.

Medications with an anticholinergic effect frequently cause serious side effects for the elderly. These medications cause dehydration, confusion, dry mouth and urinary retention (unable to urinate). When a resident is taking a medication with an anticholinergic effect, encourage the resident to drink extra fluids. You may want to contact the resident's primary care practitioner if you note a resident is taking more than one anticholinergic medication. Medications taken for the following medical problems may have an anticholinergic effect:

- Allergies;
- Colds;
- Sleeplessness, including OTC medications such as Benadryl®;
- Sleeplessness (including OTC medications such as Benadryl® or Tylenol PM®);
- Pain.

Medications used to treat behavior symptoms, sleeping problems, anxiety, pain and infections tend to cause more side effects than other drugs. Doctors and nurse practitioners try different approaches to relieve side effects. They may substitute a different medication, lower the dose or change the schedule for taking medication. Occasionally, there is no replacement for a medication and a second medication is prescribed to relieve the side effects of the first one.

## COMMON MEDICAL ABBREVIATIONS

You may encounter medical abbreviations when getting information about a resident's medication. If you do not understand information obtained, ask for clarification from an appropriate medical professional. The following table identifies some commonly used abbreviations:

### Common abbreviations used in medical documentation, medication and treatment orders

Abbreviations are case-specific. Use all uppercase or lowercase as listed unless both are listed.

a/ā	Before	NC	Nasal cannula
ac	Before meals	NGT	Nasogastric tube
AD*	Right ear	NKDA	No known drug allergies
ad lib	As tolerated/ desired	noc	Night
ADL	Activities of daily living	NPO	Nothing by mouth
am	Morning	NTG	Nitroglycerin
amt	Amount	O2	Oxygen
AS*	Left ear	OD	Right eye
ASA	Aspirin	OS	Left eye
AU*	Both ears	OT	Occupational therapy
BID/bid	Two times a day	OTC	Over the counter
BM	Bowel movement	OU	Both eyes

## Common abbreviations used in medical documentation, medication and treatment orders (*continued*)

Abbreviations are case-specific. Use all uppercase or lowercase as listed unless both are listed.

BP	Blood pressure	oz	Ounce
c or $\bar{c}$	With	pc	After meals
CBG	Capillary blood sugar	PCN	Penicillin
c/o	Complains of	per	By/through
caps	Capsules	pm	Afternoon
cath	Catheter	PO	By mouth
cc	Centimeter	PRN	As necessary
CP	Chest pain	PT	Physical therapy
D/C	Discontinue or discharged	pt	Patient
drsg	Dressing	Q	Every
FBS	Fasting blood sugar	Q2H/q2h	Every 2 hours
gm	Gram	Q3H/q3h	Every 3 hours
gtts	Drops	Q4H/q4h	Every 4 hours
g-tube	Gastrostomy tube	Q6H/q6h	Every 6 hours
hr	Hour	Q12H/q12h	Every 12 hours
HS/hs	Hour of sleep	QD/qd*	Each day
HTN	Hypertension	QH/qh	Every hour

## Common abbreviations used in medical documentation, medication and treatment orders (*continued*)

Abbreviations are case-specific. Use all uppercase or lowercase as listed unless both are listed.

Hx	History	QHS/qhs	Every night at bedtime
I&O	Intake and output	QID/qid	4 times a day
IM	Intramuscular	QOD/qod*	Every other day
IV	Intravenous	ROM	Range of motion
j-tube	Jejunostomy tube	Rx	Prescription
l	Liter	s/s	Without
liq	Liquid	S/S	Signs and symptoms
meds	Medications	SQ/sq	Subcutaneous
mEq	Milliequivalent	tabs	Tablets
mg	Milligrams	Tbsp	Tablespoon
mid noc	Midnight	TID/tid	Three times a day
min	Minute	tsp	Teaspoon
ml	Milliliter	W/ or w/	With
MOM	Milk of Magnesium	W/O or w/o	Without
N/V	Nausea/Vomiting	X/x	Times

*\* It is recommended these abbreviations not be used and the information is spelled out. The recommendation is based on high frequency of errors. The abbreviations were included since some individuals may still be using them.*