Basic Medication Administration

Many of the people you support take at least one or more medications on a daily basis. Everyone you support will need to take medication(s) at some time or another as their medical status changes. Medication administration is a high-risk activity. You will learn critical skills in this unit which are designed to increase safety and reduce the risk of error. This will help to maximize protection for the individuals you assist as well as your self. No one wants to be responsible for causing injury or harm to someone else. The health of many individuals in licensed settings depends on the skills of the DSP assisting them with taking medications.

As you will see administering medications is a very important responsibility and there are many risks. This is why it is so important to follow the Physicians orders exactly. Safety is key to preventing medication errors.

Your job doesn't end after you have passed the medication! You must also learn about each medication: why is the individual taking it, what are the side effects, how will you know if it is working, are there foods or drinks that should be avoided, other medications that should be avoided, will it prevent the individual from doing certain activities, etc. Your knowledge and understanding of medications will help you keep the individuals you support informed about their medications and to answer any questions they may have.

Effects of Medication

Medications are substances that are taken into (or applied to) the body for the purpose of prevention, treatment, relief of symptoms, or cure. The DSP may only assist individuals with administration of medications that have been ordered and prescribed by a person licensed to do so by the Department of Licensing and Regulation (i.e., Doctor, Dentist, or Nurse Practitioner.) This includes **both** prescription and over-the-counter medications. The doctor's signed, dated order or prescription provides instructions for preparation and administration of the medication.

Prescription medications are those that are always ordered by a doctor or other person with authority to write a prescription. **Over-the-counter (OTC)** medications are those that typically can be bought without a doctor's order and include vitamin supplements, herbal remedies, and commonly used medications such as Tylenol and Benadryl. In licensed residential settings even "over-the-counter" medications must have a signed, dated order or prescription from the Doctor.

PRN medications are taken "as needed" to treat a specific symptom. PRN medications include both prescription and over-the-counter medications. PRN medications must always be ordered by a doctor. The doctor's order should include the minimum and maximum number of doses, the number of days the medication may be used, under what conditions or the condition it is prescribed for and any other directions specific to the individual. The reason for each dose of PRN medication must be documented. Each dose of medication must be recorded on the individual's medication sheet, and the DSP should assure that a.m. or p.m. is noted too. To prevent errors always check for the last time a PRN medication was given before dispensing, and follow all individual medical protocols for that medication. When a PRN medication is administered the DSP must complete a follow up check in 30-45 minutes. This check involves

talking to, and observing the individual for the intended effect, and documenting that effectiveness.

* Please note that AFC administrative rules require Initiation of a review process to evaluate an individual's condition if the individual requires the repeated and prolonged use of a medication that is prescribed on an as needed
basis. The review process shall include the individual's prescribing physician, the individual or his or her designated representative, and the responsible agency.
AFC administrative rules [400.14312(4)(c-d)] [400.15312(4)(c-d)] Resident Medications

Medications are powerful substances and can have a significant impact on an individual's overall state of health, behavior, and the ability to prevent, combat, or control disease. Medications affect each individual differently. Usually a medication is taken for a primary or intended effect or action: controlling seizures, lowering blood pressure, or relieving pain.

Many drugs have other known actions besides the primary or intended one. These actions are called secondary actions or **side effects**. Many of these effects are predictable; however, some are not. Side effects may be desirable or undesirable, harmless or dangerous. Sometimes they can even be deadly. Both prescription and OTC drugs have side effects. An example of a side effect is when the medication makes the individual feel nauseated, confused, dizzy, or anxious, or when it causes a rash or a change in a bodily function such as a change in appetite, sleep pattern, or elimination.

It is not uncommon for two or more medications to interact with one another, causing unwanted side effects. An example of this would be when iron or Penicillin is given with an antacid. The antacid prevents the iron or Penicillin from being absorbed in the stomach.

Common Medication Categories

Drugs are classified into categories or classes with other medications that affect the body in similar ways. Thousands of medications are on the market. Many drugs, because of their multiple uses, can be found in more than one category. For example, Benadryl® is an antihistamine, which relieves allergy symptoms. It's also a sedative to promote sleep. Some common categories of medications used by individuals with developmental disabilities or Mental Illness include:

- Anti-convulsants
- Antibiotics
- Pain medications
- Topical ointments or creams
- Psychotropic medications, which include anti-depressants and antipsychotics

Anti-Convulsants or Anti-Seizure Medications

Seizures can be treated by medications. Medications prescribed to control seizure activity in individuals with epilepsy are often referred to as anti-convulsants. The type of seizures an individual has determines which anticonvulsant the physician prescribes.

It is very important for you to provide accurate information to the physician on the symptoms of the person's seizure so that the most appropriate medication can be prescribed. Some of the more common anticonvulsants are Depakene, Tegretol, Neurontin, Lamictal, Topamax, and Keppra.

When taken with other drugs in the same or different categories, many anti-convulsants may interact; that is, affect the amount and usefulness or impact each other. Some anti-convulsants deplete vitamins so the person may need a multivitamin supplement and extra folic acid. Be sure to ask the physician or pharmacist. The physician may not think about this nutritional issue unless you bring it up.

A number of prescription and OTC medications, such as anti-psychotics, Ibuprofen, as well as alcohol and illicit drugs such as cocaine and amphetamines, may lower the "seizure threshold," or increase the likelihood of a seizure.

Most anti-convulsants have central nervous system effects including effects on thinking (especially Phenobarbital). Effects include dizziness, sedation, mood changes, nervousness, or fatigue.

Common Side Effects of Anti-Convulsants

- Sleepiness, lethargy, cognitive impairment, altered gait, seizure breakthrough, and memory loss are typically related to the dosage.
- Stomach upset (especially with Tegretol and Depakote), diarrhea, gum growth and swelling (with Dilantin), weight gain, and hair loss or growth.
- Liver or kidney dysfunction, hyperactivity, aplastic anemia, allergic response.

To obtain this information, talk to the prescribing doctor and the pharmacist who fills the doctor's order. Also ask the pharmacist for a copy of the medication information sheet and have him or her review it with you. Other sources of information include medication reference books from your local library or bookstore. Web sites such as Safemedication.com or drugconsult.com also provide medication information. Make sure that you know the answers to all of these questions before you assist an individual in taking a medication.

Psychotropics and Psychiatric Disorders and Medications Used for Treatment

Psychiatric disorders may involve serious impairments in mental or emotional functioning, which affect a person's ability to perform normal activities and to relate effectively to others. Many individuals with developmental disabilities who also have a psychiatric disorder, and individuals who have been diagnosed with a mental illness are treated with psychotropic medications alongside other interventions. Psychotropic medications are central nervous system drugs that affect mental activity, behavior, or perception. The following

information is on three classifications of psychiatric disorders for which individuals might take medication.

1. **Mood Disorders**
There are two main types of mood disorders: depression and bi-polar disorder.

Depression (lasting two or more weeks), can manifest as feelings of hopelessness or even self-destruction; for example, not wanting to eat or get out of bed in the morning. Anti-depressants are used to treat depression.

Bi-polar Disorder, also called Manic Depression, is often marked by extremes in mood, from elation to deep despair and/or manic periods consisting of excessive excitement, delusions of grandeur, or mood elevation.

2. **Schizophrenia**
Schizophrenia can mean hallucinations and sensory misperceptions; delusions (strange ideas or false beliefs, including paranoia); distorted misinterpretation and retreat from reality; ambivalence; inappropriate affect; and bizarre, withdrawn, or aggressive behavior.

3. **Anxiety Disorders**
Anxiety disorders are typified by tension, fear, apprehension, discomfort, and distress. Two main types of anxiety disorders are:
a. **Generalized Anxiety Disorder**
b. **Obsessive-Compulsive Disorder**

*Note: Psychotropic Medication: Anti psychotics and Anti depressants require "**informed consent."** This means that the parent, guardian, or individual (depending on the situation) must give consent for the medication to be administered in a residential setting.
*Refer to the attachment at the end of this unit for common medications and side effects.

Following Doctor's Orders for Tests

Some medications (Tylenol, Lithium, Depakene) can be toxic and cause damage, especially if taken for a long period of time. Every one responds differently to medications; some responses are related to how quickly our bodies are able to break down (metabolize) the medication. For this reason, physicians sometimes start a new medication at low doses and increase it in response to signs of a positive effect such as a reduction in seizures or the development of better sleep patterns.

Checking blood serum levels by analyzing the concentrations of medications in an individual's blood can be important. For example: many anti-convulsants require an Anti Epileptic Drug Level (AEDL) every six months. Physician's orders for lab tests and follow-up appointments must be followed. Blood serum level tests help the physician

determine the effectiveness of the medication, make recommendations for changes to the dose, strength, or medication used and develop a treatment plan.

Monitoring the Effects of Medication

The unintended effects of medication, called **side effects**, can occur at any time. Some mild side effects may disappear after a short time. Others will persist the entire time the medication is taken and sometimes beyond. Some side effects are life threatening. It is very important to learn about the medications each individual is taking, and to know what possible side effects may occur. Ask the doctor what kind of reactions should be brought immediately to his or her attention. The pharmacy is a good source for information about the effects of medication. Medication information sheets should come with every new medication. Pharmacists are knowledgeable about drugs, side effects, and interactions.

Asking both the doctor and the pharmacist is a good strategy because it takes advantage of two important expert resources within the health care system. It is helpful to write possible side effects on the individual's Medication Sheet and attach the medication information sheet.

Physical and behavioral changes that are due to the effect of a medication are often difficult to identify. There may be many different reasons for the same sign or symptom. A change in behavior may be due to a medication change or a change in the person's environment. A sore throat may be one of the first symptoms of a cold or may be a side effect of a medication.

Your responsibility is to consistently and accurately observe, report, and record any change in the normal daily routine, behavior, ways of communicating, appearance, physical health, and general manner or mood of the individual you support. Interpretation (deciding the meaning) of an observed side effect is the responsibility of the individual's doctor.

Monitoring for the Effects of Medication

- For each individual you support, know the intended and unintended effects of each medication he or she takes.
- Observe for intended and unintended effects of the medication.
- Document what you observe.
- Report observations to the doctor.
- Follow the doctor's directions to continue, change, or discontinue the medication.

- Monitor the individual closely for side effects when a new medication has been prescribed or the dosage increased.

Common Side Effects of Medication that You Should Report to the Doctor Include:

- Skin Rash
- Increased heart rate or feeling like the heart is racing
- Changes in sleep
- Decreased energy
- Sedation
- Changes in weight or eating patterns
- Tremors, shakiness
- Balance problems
- Shuffling when walking
- Confusion
- Changes in ability to concentrate
- Hyperactivity
- Abnormal movements (face, tongue, or body)
- Muscle pain
- Stooped posture
- Blank facial expression
- Feeling dizzy or light-headed
- Dry mouth
- Constipation
- Blurred vision
- Diarrhea
- Nausea
- Vomiting
- Increased risk of sunburn

Tardive Dyskinesia

Tardive Dyskinesia (TD) is a potential long-term neurological side effect of antipsychotic medications such as Mellaril, Thorazine, Risperdal, and Zyprexa. Symptoms may include rapid eye blinking, puckering, or chewing motions of the lips and mouth, or facial grimacing. Symptoms may worsen if the medication is not reduced or discontinued. TD can become permanent. Discuss this risk with the psychiatrist or doctor before starting anti-psychotic medications. You should monitor individuals for these serious side effects on a regular basis. Usually when an individual is taking antipsychotic medication an **Abnormal Involuntary Movement Scale (AIMS)** should be completed every six months.

Medication Interactions

Interactions between two or more drugs and interactions between drugs and food and drink may cause adverse reactions or side effects. Who would ever guess that taking your blood pressure medicine with grapefruit juice instead of orange juice could make you sick? Or that licorice could be lethal when eaten with Lanoxin or Lasix? How could cheddar cheese, pepperoni pizza, or pickled herring combined with an antidepressant create a hypertensive crisis? Yet all of these interactions are real and could lead to disaster.

Drug interactions may be between:

- Two or more drugs
- Drugs and food
- Drugs and drink

Drug interactions may also be caused by mixing drugs and alcohol. Alcohol in combination with any of the following is especially dangerous**:**

- Antianxiety drugs, such as Librium, Valium, or Xanax.
- Antidepressants.
- Antiseizure medicines.
- Antihistamines.
- Ulcer and heartburn drugs such as Zantac and Tagamet.
- Some heart and blood pressure medicines.

Guidelines for Reporting a Suspected Adverse Reaction to Medication

When you suspect that the individual is having an adverse reaction to a medication, **urgent medical care** may be needed. Report the suspected reaction to the doctor and follow the doctor's advice. When you talk to the doctor, be prepared to give the following information:

A list of current medications.

- Description of how the individual looks (pale, flushed, tearful, strange facial expression, covered in red spots).
- Description of any changes in individual's behavior or level of activity.
- Description of what the individual says is wrong or is hurting.
- When the symptoms first started.

Description of any changes in bodily function:

- Is the individual eating or drinking?
- Does he or she have a good appetite or no appetite?
- Any nausea, vomiting, loose feces, constipation, problems urinating?
- Describe any recent history of similar symptoms, any recent injury or illness, or any chronic health problem.
- Describe any known allergies to food or medication

Severe, Life-Threatening Allergies (Anaphylaxis or Allergic Reaction Shock)

Some individuals have severe allergies to medications, especially penicillin. The **allergic reaction** is sudden and severe and may cause difficulty breathing and a drop in blood pressure (anaphylactic shock).

Anaphylactic Shock is a generalized systemic reaction, frequently fatal, which usually occurs within minutes after contact with an allergen.

If an individual has had a severe allergic reaction to a medication (or insect stings or food), he or she should wear an identification bracelet that will tell health professionals about the allergy.
Call 911 immediately to get emergency medical care if signs of a severe allergic reaction develop, especially soon after taking a medication.

Signs of an allergic reaction include:

- Wheezing or difficulty breathing.
- Swelling around the lips, tongue, or face.
- Skin rash, itching, feeling of warmth, or hives.

Some individuals have a severe allergy to insect stings or certain foods. If an individual shows any of these same signs of a severe allergic reaction soon after eating a food or being stung by an insect, call 911 immediately to get emergency medical care.

Reading and Understanding Medication Labels

To safely administer medications, you must know how to read and understand a medication label (pharmacy label). The pharmacist prepares the medication using the doctor's written order and places a label on the medication container that provides instructions for taking the medication.

Medications have both a **generic name** and a **trade name**. The generic name is the name given by the federal government to a drug. The trade or brand name is the name given by the manufacturer to a medication. For example, acetaminophen is the generic name for Tylenol. Tylenol is the trade or brand name. The prescribing doctor may order the medication by either name. The pharmacy label may have either name as well. Most pharmacies will fill prescriptions with a generic medication GEQ (Generic Equivalent) unless the Physician has written DAW (Dispense as written) on the order.

The pharmacy label will indicate if a generic form of the medication is used. For example: Carbamazepine is the GEQ for Tegretol. Generic medications can be cost effective; the active ingredients are the same, the "fillers" or in-active ingredients will vary. Some individuals will respond differently to a generic verses a brand name medication, this is usually related to the in-active ingredients.

Each prescribed medication must be kept in its original container with the pharmacy label attached. Careful reading of the label is critical to ensuring medication safety.

The information on the pharmacy medication label includes:

- Pharmacy/pharmacist name and address.
- Prescription number or other means of identifying the prescriber (used refills).
- Individual's name.
- Prescriber's name (doctor).
- Name of medication.
- Strength (dose).
- Directions for how to use the medication.
- Manufacturer.
- Quantity (for example, number of pills, or other measurement of the amount of the prescription).
- Date the prescription was filled.
- Expiration or discard date.
- Number of refills remaining
- Condition for which prescribed (most pharmacies include this information if it is on the doctor's order.)

Pharmacy Abbreviations and Symbols

The following abbreviations and symbols are commonly used on pharmacy medication labels. In order to read and understand medication labels, the DSP must be familiar with these abbreviations and symbols.

Rx = Prescription	TBSP = tablespoon (3 tsps or 15 ml)
OTC = Over-the-Counter	h. = hour
p.r.n. = when necessary, or as needed	Qty = quantity
q (Q) = every	b.i.d. (BID) = twice a day
t.i.d. (TID) = three times a day	q.i.d. (QID) = four times a day
oz = ounce	BT = bed time
D/C or d/c = discontinue	STAT = Immediately
mg = milligrams	GM, gm = grams (1,000 mg)
Cap = capsule	Tab = tablet
A.M. = morning	P.M. = afternoon/evening

Dose is a term used to describe how much medication or how many units are to be taken at any time. A dose can be described as a single dose or a daily dose. For example, an oral medication (capsules or tablets) may be prescribed as:

AMOXICILLIN 500 mg capsules *Take 1 capsule 3 times daily*	In this example the individual is taking a 500 mg single dose and a 1500 mg daily dose
TEGRETOL 200 mg tabs *2 tabs at 7 a.m. 2 tabs at 2 p.m.*	In this example the individual is taking 2- 400 mg single doses, and a 200 mg single dose and a

and 1 tab at 9 p.m. 1000 mg daily dose

A liquid medication may be prescribed as:

AMOXICILLIN 250 mg/5cc
Give 5cc (5cc= 1 teaspoon)
4 times a day or Q.I.D.

In this example the individual is taking a 5cc single dose and a 20cc daily dose

Oral medications (capsules or tablets) are usually prescribed in mg (milligrams) or gm (grams). Liquid medications are usually prescribed in ml (milliliters), cc (centimeters), or oz (ounces). Liquid medications may also be prescribed in tsp (teaspoon), or tbsp (tablespoon). Labels on liquid medications will also show the strength of the medication (250 mg/5cc). A typical medication label looks like the one shown below. Do not "scratch out," write over, or change a drug label in any way. Any change to a prescription requires a new doctor's order that must be refilled by the Pharmacist. The doctor must also write an order to discontinue the previous medication or dose.

ABC Pharmacy
Dr. Anderson

RX 10483 4/25/08

JACOB SMITH
TAKE 1 TABLET ORALLY EVERY 8
HOURS FOR 10 DAYS FOR BRONCHITIS
8 a.m., 4 p.m., 12 a.m.

AMOXICILLIN 250 MG TABLETS #30

EXPIRES: 7/14/09 NO REFILLS

MFG: MANY MEDICATIONS, INC
FILLED BY: BRS

Label Warnings
Medication containers may also have separate warning labels affixed by the pharmacist that provide additional information on the use of the medication; for example, "Medication Should Be Taken with Plenty of Water." Some additional examples are listed below:

For External Use Only

May Cause Discoloration of the Urine or Feces

May Cause Drowsiness or Dizziness

Finish All This Medication Unless Otherwise Directed by Prescriber

It May Be Advisable to Drink a Full Glass of Orange Juice or Eat a Banana Daily

Take Medication on an Empty Stomach 1 hour *before* or 2 Hours *after* a Meal Unless Otherwise Directed bv Your Doctor

Do Not Take With Dairy Products, Antacids or Iron Preparations Within One Hour of This Medication

Learning About medications

Medication safety includes learning about the medications that you are assisting another to take. You need to know the answers to all of the following questions:

- What is the medication, and why is it prescribed?
- What is the proper dosage, frequency, and method for taking the medication (for example by mouth, topical)?
- How many refills are needed?
- What are the start and end dates for the medication? Should it be taken for 7 days, 10 days, a month?
- Are there possible side effects, and to whom should these side effects be reported?
- What should be done if a dose is missed?
- Are there any special storage requirements?
- Are there any special instructions for use of this medication? For example, should certain foods, beverages, other medicines, or activities be avoided?
- What improvements should be expected, and when will they start showing?

To obtain this information, talk to the prescribing doctor and the pharmacist who fills the doctor's order. Also ask the pharmacist for a copy of the medication information sheet and have him or her go over it with you.
Other sources of information include medication reference books from your local library or bookstore.
Websites such as www.*safemedication.com* or *www.rxlist.com* also provide medication information.

When talking to the doctor or pharmacist, use the Medication Safety Questionnaire (see the example form below) to make sure you get all your questions answered.

Medication Safety Questionnaire

Name			
Brand:_____ Generic:_____	Dose (e.g., mg) and form (e.g., tabs)	When to take each dose?	For how long?

1. What is the medication supposed to do?

2. How long before I will know it is working or not working?

3. What about serum (blood) levels? Other laboratory work? How often? Where? Standing order?

4. If the individual misses a dose, what should I do?

INTERACTIONS?

5. Should this medication be taken with food? □ Yes □ No
   At least one hour before or two hours after a meal? □ Yes □ No

6. Are there any foods, supplements (such as, herbs, vitamins, minerals), drinks (alcoholic, for example), or activities that should be avoided while taking this medication?
   □ Yes (Which ones?)
   _____
   □ No

7. Are there any other prescription or over-the-counter medications that should be avoided?
   □ Yes (Which ones?)
   _____
   □ No

SIDE EFFECTS? IF SO, RESPONSE?

8. What are common side effects?

9. If there are any side effects, what should I do?

10. If the drug is being prescribed for a long period of time, are there any long-term effects?

Documentation

Medication safety also includes recording each dose of medication taken (or missed for any reason). The DSP will use the **Monthly Medication Sheet** (see example located at the end of this unit)**,** or ask the pharmacist to provide a form for documentation of medication. Most pharmacies will print a Medication Sheet for home use.

The use of a Medication Sheet for each individual (also know as a Medication Administration Record) increases medication safety and reduces the risk of errors. The Medication Sheet provides a way for the DSP to document each dose of medication taken, any medication errors, and other pertinent information related to assisting with administration of a medication.

The DSP should document each dose of medication given immediately after administration, and should only set up one person's medications at a time. The Medication Sheet includes key information about the individual, including any known drug allergies, and information about the individual's medications, including the name of the medication, dose, and the times and way the medication is to be taken.

To avoid errors, it is advised that premade medication labels from the pharmacy be placed on the Medication Sheet. When possible, appropriate pre-made warning labels should also be placed on the Medication Sheet (such as "take with food"). Whenever a prescription is changed, the Medication Sheet must be updated. To document that a medication has been taken, the DSP should write down the date and time in the place provided, and initial for each dose of medication. This must be done at the time the medication is taken by the individual, not before and not hours later.

*A note about pre-made medication labels. Not all Pharmacies offer this service. If you work in a residential setting that does not have this service, it may be the responsibility of the DSP to "set up" the medication sheet, and this is referred to as **Transcribing.** Transcribing is transferring the information from the medication label on the pill bottle or bubble pack to the medication sheet. You must first check to make sure that the pharmacy label matches the doctor's order exactly before transcribing the information.

Refer to AFC administrative rules 400.14312(4)(b)(i-iv) [400.15312(4)(b)(i-iv)].

Five Rights of Assisting with Medication Administration

Following the Five Rights is basic to medication safety. The DSP needs to be sure, he or she has the:

- Right individual
- Right medication
- Right dose
- Right time
- Right route

Following the Five Rights each time is the best way for the DSP to prevent medication errors. When assisting an individual, you must read and compare the information on the medication label to the information on the Medication Sheet three times before the individual takes the medication. Checking three times helps the DSP to ensure that you are assisting the right individual with the right medication and dose at the right time and in the right route (way).

Never assist an individual with medication from a container that has no label!

If, at any time, you discover that any of the information does not match, **stop**. You may have the **wrong** individual, be preparing the **wrong** medication in the **wrong** dose at the **wrong** time, or the individual may be about to take the medication in the **wrong** way.

Think through each of these possibilities and decide what to do. If you are unsure, you may need to get help. Ask another DSP, the home manager, or in some situations, you may need to call the doctor or pharmacist.

Check the Five Rights three times by reading the medication label information and comparing it to the Medication Sheet as follows:

First Check
When you remove the medication from the storage area

Second Check
When you remove the medication from the original labeled container

Third Check
Just before you assist the individual to take the medication

Remember Prevention is the #1 priority!

In some cases, an adult may independently take their own medication. If an adult is to independently self-administer medication, a physician must provide a written statement that the individual is able to administer and store his or her own medications.

In all cases, the medications must be properly stored in a locked cabinet. The DSP should monitor the individual and document and report any changes in the individual's ability to independently take medications to the doctor.

The Five Rights

1. Right Individual

First, read the name of the individual on the pharmacy label for whom the medication is prescribed. When assisting an individual with any medication, it is essential that you know the individual. If uncertain of an individual's name or identity, consult another staff member who knows the individual. The DSP can also refer to the individual's record book and check the picture located there.

2. Right Medication

After you have verified that you have the right individual, read the name of the medication on the label. To make sure that you have the right medication for the right individual, **read the label three times** and compare it to the individual's medication sheet. The label and medication sheet must match exactly.
If they do not match, do not administer the medication until you have contacted the Pharmacist for clarification.

3. Right Dose

Read the medication label for the correct dosage. Be alert to any changes in the dosage.

• Question the use of multiple tablets providing a single dose of medication.
• Question any change in the color, size, or form of medication.
• Be suspicious of sudden large increases in medication dosages.

4. Right Time
Read the medication label for directions as to when and how often the medication should be taken. Medication must be taken at a specific time(s) of the day. Stay with the individual until you are certain that he or she has taken the medication.

You need to know:

- How long has it been since the individual took the last dose?
- Are foods or liquids to be taken with the medication?
- Are there certain foods or liquids to avoid when taking the medication?
- Is there a certain period of time to take the medication in relation to foods or liquids?
- Is it the right time of day, such as morning or evening? The rule is half hour before and half hour after the prescribed time. If a medication is ordered at 8 a.m. the DSP has from 7:30 – 8:30 to administer the medication.
- What time should a medication be taken when it is ordered for once a day? In the morning? At 12:00 noon? At dinnertime? Usually when a medication is ordered only once a day, it is given in the morning; however, it is best to check with the doctor or pharmacist.
- Some medications may be prescribed by the physician using the individuals Standing Medication Order form (Ancillary Orders) to be given when certain conditions exist. Medications for headache, constipation, and upset stomach are some examples that may fall in to this category. <u>There should be specific written instructions from the physician regarding when and under what conditions the medication should be administered.</u>

5. Right Route
Read the medication label for the appropriate route or way to take the medication. The route for tablets, capsules, and liquids is "**oral**." This means that the medication enters the body through the mouth. The oral route is the most convenient and most common route of medication administration. The oral route is the method by which you will be administering most medications.
Other routes include:
Eye drops or ointment (**ophthalmic**)
Nose (nasal sprays)
Ear drops (**otic**)
Topical (which includes dermal patches or ointments to be applied to the skin)
Rectal (suppositories)
Vaginal
Injection
*Note: If you work in a residential setting where individuals need injections, tube feeding, or glucose monitoring you will receive additional training per the established medical protocol specific to the individual and the person centered plan.

Drug Forms

Drugs are manufactured in several forms. Some of the common forms are listed below:

Capsules are small containers made from gelatin. The medicine is placed in the capsule which readily dissolves in the stomach.

Tablets are pressed or molded preparations of powdered drugs. When exposed to liquid, they expand and break apart.
Some tablets have a coating these are called "**enteric coated**" tablets. The coating prevents the tablet from dissolving until it has passed through the stomach. Usually medications that have the potential (side effect) of stomach upset/distress come with this type of coating.
Some tablets are "**scored**" which means there is a visible line and these tablets may be cut in half.

Note: Don't crush tablets or open capsules unless the prescribing physician gives specific directions to do so.

Ointments/ Creams are for external application to the skin or mucus membranes.

Suppositories are drugs for insertion into the vagina or rectum. The suppository will dissolve or melt at room temperature releasing the drug for absorption through the mucus membrane. These are usually stored in a lock box in the refrigerator.

Elixirs are liquid preparations of drugs.

Many drugs come in several different forms! If an individual has trouble taking a medication, talk to the individual about their needs and preferences and then talk with the Doctor about other forms of the medication or optional ways to take the medication.

Refusal of Medications

An individual has the right to refuse his or her medication. It is the DSP's responsibility to work with and support the individual in taking his or her medicine. If an individual refuses to take the medication, ask "Why?" Do not try to crush or hide the medication in the individual's food to get him or her to take the medicine. 99% of the time the DSP can figure out a way to encourage the individual to take his or her prescribed medication, without being coercive.

Reasons for Medication Refusal and Possible Helpful Suggestions

The following is a list of some common reasons an individual might refuse to take his or her medication and suggestions on how to provide assistance:

Unpleasant Taste

- Give the individual ice chips to suck on just before taking the medication. This will often help mask the bad taste.
- Ask the doctor or pharmacist if the medication can be diluted to cover a bad taste. Ask the physician or pharmacist if there is a juice compatible with the medication that can be used (for example, apple juice). A note to this effect should be on the prescription label.
- Provide crackers, apple, or juices afterwards to help cover up the bad taste.

Unpleasant Side Effect – Drowsiness

Report the unpleasant side effect and ask the prescribing doctor if the individual can take the medication at a different time (such as before bedtime). Also ask about changing the medication or treating the side effect.

Lack of Understanding

Provide simple reminders on what the name of the medication is and what the medication does. For example, “This is Depekene a medication that stops your seizures.” Remember, all the individuals you support should be involved in their health care. This involves providing information about medications, doctor appointments, healthy life style choices, etc. The role of the DSP is to support the individual in taking the medication by listening to what the individual’s concerns are and trying to address them.

Denial of Need for Medication

Discuss the need for the medication, but do not argue. It may help to show the individual a statement written by the physician; for example, “Alma, you take your heart medication everyday.”

Documenting and Reporting

Medication refusal needs to be documented on the medication sheet and brought to the attention of the prescribing doctor. The doctor may be able to accommodate an individual’s medication preference or special health consideration. Any unused dose should be set aside and destroyed in an acceptable way.

Remember: Never force an individual to take medication: he/she has the right to refuse medication. If an individual refuses medication often or has a history of refusals the physician can provide instructions on how the DSP should proceed.

Medication Errors

The Food and Drug Administration evaluated nation wide reports of fatal medication errors that it received during a five year period and found that the most common types of errors involved:

- Administering an improper dose (41%)
- Giving the wrong drug (16%), and
- Using the wrong route of administration (16%).

Errors were caused by a lack of skill and/or knowledge and communication errors

Every medication error is serious and could be life threatening. The DSP's job is to safely assist individuals to receive the benefits of medications. Preventing medication errors is a priority. In this training you have learned the best way to help individuals take medication safely and to reduce the risk of errors. But even in the best of situations, errors may occur. When they do, you need to know what to do.

A medication error has occurred when:

The **wrong** person took the **wrong** medication.

The **wrong** dosage was taken.

Medication was taken at the **wrong** time.

Medication was taken by the **wrong** route.

Medication was **not** taken.

Every medication error is serious and could be life threatening.

If an error does occur, it must be reported on an Incident Report. The error must be recorded on the Medication Sheet by initialing the square or box and putting a circle around it in red ink. Check with the home manager for documentation requirements specific to your home. The documentation should include the date, time, medication involved, description of what happened, who was notified, doctor's name, instructions given, and action taken.

The DSP may be able to determine what action to take when a medication error occurs by using the drug insert provided by the pharmacy. The drug insert will provide answers to common medication questions. The guidelines provided in the drug inserts do not give enough direction should the following medication errors occur: When a person is accidently given more of their own medicine than has been ordered, or If they are given someone else's medications.

In the event that either of these errors are made, call the prescribing physician(s) (Primary care Physician, Psychiatrist, Neurologist, etc.) immediately.

All residential settings should have drug inserts readily available for DSP's to review and refer to as questions and concerns arise. Additionally, each residential setting may have policies and procedures related to medication errors, which will provide specific information to the DSP on how to document, who to notify, and how to proceed.

Remember, Prevention Is the #1 Priority.

You can prevent errors by:

- Staying alert
- Following the **Five Rights.**
- Avoiding distractions.
- Knowing the individual and his or her medications.
- Asking the home manager for help if you are unsure about any step in preparing, assisting, or documenting medications.
- Always completing the medication count before beginning to administer medications

Handling medications in Licensed Residential Settings

Ordering Medications from the Pharmacist

It is essential that medications are ordered from the pharmacist on a regular basis so that the individual always has needed medication. It is a good idea to order refills a week before running out. New medications should be ordered immediately after being prescribed by the doctor. Some pharmacies provide extra services and package medications in ways that can be helpful, such as bubble packs. Prepackaged bubble packs are popular, but it is essential for the DSP to understand how to use them.

Packaging Medications for Dose Away from Home

The DSP may package a single dose for each medication needed for no more than a day when an individual will be away from home for trips, activities in the community, or elsewhere. With the doctor's written approval, the individual who will take it can carry the medication.

Without written approval, the medication can be given to a responsible party in an envelope (or container) labeled with the: individual's name, name of the medication and instructions for assisting with administration of the dose.

If an individual is regularly taking a dose of medication at school or at a day program, tell the physician and pharmacist. The doctor may order a separate prescription for a particular dose of medication, or the pharmacist can divide the medication in to two labeled containers. A signed doctor's order must be given to the appropriate program staff.
When an individual will be gone for a Leave of Absence (LOA) the DSP should follow the above procedure and obtain separate labeled containers with the exact amount of medication required. If time doesn't permit the DSP to get separate containers then the medication must be given to the responsible party in its original pharmacy container. This is documented on the medication count sheet. When the medications are returned to the home the DSP will need to do a medication count with the responsible party and document the amount of medication returned after the leave on the medication count sheet. If there is any discrepancy between what should have been given and the count this will give the DSP the opportunity to talk with the responsible party and find out what happened. All information should be documented.

Proper Medication Storage

The following guidelines for medication storage should be followed in all licensed residential settings:

- All medications must be stored in locked cabinets or drawers, unless ordered otherwise. The medication storage area should provide an environment that is cool, dry, and away from direct sunlight.
- Medications must be stored in original containers from the pharmacy that dispensed them.
- The medication cabinet should be clean and orderly with adequate space.
- There should be adequate lighting in this area.
- Medication should never be left unattended.
- Any **controlled substances** must be **double locked**.
- Only one staff (per shift) should have a key to the cabinet.
- Refrigerated medications must be in a locked container. Refrigerator temperature should be in the 36-46 degree range. There should not be any food stored in the medication refrigerator.
- Topical medications, such as ointments, creams, etc. must be stored separately from the oral medications. If they are in the same cabinet, they must be in a separate basket or container. Topical medications must also be locked.
- The keys to the medication cabinet must be on the person assigned to medication administration at all times!
- Never leave the keys out where they may be picked up.
- Medications must not be stored over a stove, or near a heat source. Heat can change the chemical properties in medications.
- Medications should never be stored with any other products.

Disposal and Destruction of Medication

Each residential facility should have a written plan for the disposal of medications. There are several acceptable ways to dispose of medications. The DSP should review the policy in the residential setting where they work. All medications which have been discontinued, contaminated, deteriorated, or expired will require disposal. Medications should be labeled for disposal and separated from the other medications in a locked cupboard or container.

DSP staff must complete the medication disposal sheet for all destroyed medications, if medications are returned to the pharmacy the pharmacist or designee should sign the form. The forms are located at the end of this unit.

The following procedures are recommended when disposing of medications.

Remember to refer to home policy!

Refer to AFC administrative rule [400.14312(7)] [400.15312(7)]

a. Check with local pharmacy to see if they have a “take back program”. Keep the medication in their original container, scratch out, or use permanent marker to make personal information unreadable. If NO “take back program”, keep the medication in the original container, scratch out, or use permanent marker to make personal information unreadable.

b. To reduce the opportunity for misuse, prepare the drugs for disposal by:
   1) For solid medications, such as pills or capsules: add a small amount of water to at least partially dissolve them. Seal the container with duct or other opaque tape.
   2) For liquid medications: add enough table salt, flour, charcoal, or nontoxic powdered spice to make a pungent, unsightly mixture that discourages anyone from eating it. Seal the container with duct or other opaque tape to prevent leaks or breakage.
   3) For blister packs: wrap the blister packages containing pills in multiple layers of duct or opaque tape.

c. Double bag the contained drugs in a closable bag, or put it in another container with the lid taped closed and put it in the trash. This helps prevent immediate identification that the package contains drugs and helps contain any leaks if the container breaks during the disposal process, e.g., when plastic garbage bags tear, the trash can tips over, etc. Avoid putting drugs into any material or food that might be attractive to pets or wildlife. * (*From Michigan Department of Environmental Quality)

2. Medications must be disposed of so that animals or humans cannot retrieve them.

3. Controlled substances must be disposed of by the RN (with a witness) or by a pharmacist.

If the pharmacy does not have a “take back program” medications, except controlled substances, may be destroyed by two DSP’s, one acting as a witness.
Follow the home policy.

Example Medication Disposal Form

Community Mental Health
FOR CENTRAL MICHIGAN

Medication Disposal Form

Type	Method	Disposing Staff Signatures	Medication Name and Medication Dose	Lot # Or Prescription #	Amount of Medication	Reason for Disposal
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued
☐ Sample ☐ Consumer's Medication	☐ Medication Takeback ☐ Sharp Disposal	1. 2.	☐ Injectable Medication		Number ____ ☐ Tablet/Capsule ☐ Vial ☐ Other	☐ Expired ☐ Contaminated ☐ Unwanted ☐ Discontinued

County: ____ Notes: ____

Staff ____ Date ____

Staff ____ Date ____

2/29/24

Prior to taking the Basic Medication Administration Test

DSP must complete these activities:

- Activity #1Medication Label Abbreviations
- Activity #2 Medication Safety Questionnaire
- Physician's Orders & Transcribing Packet
- Activity #3 Documenting Medication Errors

DSP Review the listed handouts located on pages 24-28:

- Common Categories of Medications
- Psychotropic Medications
- Guidelines for Assisting with Administration of Medication

Common Medication Categories

Drugs are classified into categories or classes with other medications that affect the body in similar ways. Many drugs, due to their multiple uses, can be found in more than one category.

Here is the way the *Nursing Drug Handbook* categorizes medications:

- **Anti-infective drugs**: antibiotics, antifungals.
- **Cardiovascular system drugs**: antihypertensives, antiarrhythmics
    - Central nervous system drugs
    - Anticonvulsants, analgesics
    - Sedative-hypnotics
    - Antidepressants, antianxiety
    - Antipsychotics
- **Autonomic nervous system drugs**: skeletal muscle relaxants, adrenergics.
- **Respiratory tract drugs**: antihistamines, expectorants.
- **Gastrointestinal tract drugs**: antacids, antidiarrheals, laxatives.
- **Hormonal drugs**: estrogens, progestins.
- **Antidiabetic drugs**: glucagons, thyroid hormones.
- **Drugs for fluid and electrolyte balance**: diuretics, acidifier, alkalinizers.
- **Hematologic drugs, anticoagulants**.
- **Antineoplastic drugs**, **alkylating drugs**, **antimetabolites**.
- **Immunomodulation drugs**: vaccines and toxoids; **immunosuppressants**.
- **Ophthalmic**, otic, **and nasal drugs**; ophthalmic anti-inflammatory.
- **Topical drugs**: corticosteroids, scabicides, anti-infectives.
- **Nutritional drugs**: vitamins and minerals; calorics.
- **Miscellaneous drug categories**: antigout drugs; enzymes; gold salts.

Psychiatric Disorders and Psychotropic Medications Used for Treatment

Psychiatric disorders may involve serious impairments in mental or emotional functioning which affect a person's ability to perform normal activities and to relate effectively to others. Many individuals with developmental disabilities who also have a psychiatric disorder, and individuals who have been diagnosed with a mental illness, are treated with psychotropic medications in conjunction with other interventions. Psychotropic medications are central nervous system drugs that affect mental activity, behavior, or perception. The following information is on three classifications of psychiatric disorders for which individuals might take medication.

1. **Mood Disorders**

One type of mood disorder is ***Depression*** (lasting two or more weeks), which can mean feelings of hopelessness or even self-destruction; for example, not wanting to eat or get out of bed in the morning. Anti-depressants are used to treat depression. Anti-depressant medications include:

- Tofranil
- Norpramin
- Wellbutrin
- SSRIs (selective serotonin reuptake inhibitors—a new class of medications) Include:
    - Luvox (fluvoxamine)
    - Paxil (paroxetine)
    - Prozac (fluoxetine)
    - Zoloft (sertraline)

Another type of mood disorder***, Bi-polar Disorder***, also called Manic Depression, is often marked by extremes in mood, from elation to deep despair and/or manic periods consisting of excessive excitement, delusions of grandeur, or mood elevation. Lithium, Zyprexa, Depakote, and Lamictal are used to treat bipolar disorders. Taking these types of drugs requires close monitoring and consultations with a Physician or Psychiatrist and may include frequent blood tests as well.

2. **Schizophrenia**

Schizophrenia can mean hallucinations and sensory misperceptions; delusions (strange ideas or false beliefs, including paranoia); distorted misinterpretation and retreat from reality; ambivalence; inappropriate affect; and bizarre, withdrawn, or aggressive behavior.

Major Tranquilizers are used for schizophrenia, anxiety, and severe behavior problems. These include:

- Haldol (haloperidol)
- Mellaril (thioridazine)
- Proloxin (fluphenazine)
- Risperdal (risperidone)

• Serentil (mesoridazine)
• Thorazine (chlorpromazine)

Newer medications in this category are:

- Zyprexa (olanzapine
- Abilify (aripiprazole)
- Clozaril (clozapine)

3. **Anxiety Disorders**

Anxiety disorders are typified by tension, fear, apprehension, discomfort, and distress. Two main types of anxiety disorders are:

a. **Generalized Anxiety Disorder**

b. **Obsessive-Compulsive Disorder**

Anti-anxiety medications are used to treat anxiety disorders and include:

• Buspar (buspirone)
• Librium (chlordiazepoxide)
• Valium (diazepam)
• Xanax (alprazolam)

*Note: Psychotropic Medication: Anti psychotics and Anti depressants require "**informed consent.**" This means that the parent, guardian, or individual (depending on the situation) must give consent for the medication to be administered in a residential setting.

Common Side Effects Associated With Psychotropic Medications

Source: Psychotropic Medications in Person with Developmental Disabilities, by Dr. Bryan King.

Common Side Effects Associated With Psychotropic Medications		
Medication	**Examples**	**Side Effects**
SSRIs (selective serotonin reuptake inhibitors)	Prozac, Paxil, Zoloft, Luvox, Celexa	Stomach upset, sleeping problems, behavioral problems
Trycyclic anti-depressants	Anafranil, Elavil, Tofranil, and Norpramin	Constipation, dry mouth, dizziness
Other anti-depressants	Desyrel, Serzone, Remeron	Sleepiness, dizziness, dry mouth
Stimulants	Ritalin, Dexedrine, Cylert	Insomnia, loss of appetite, mood changes
Neuroleptics/antipsychotics	Haldol, Risperdal, Mellaril	Sedation, weight gain, movement problems, restlessness
Mood stabilizers	Lithium	Memory problems, thirstiness, shakiness
Anxiolytics	Valium, Xanax, Ativan	Sedation, unsteadiness, disinhibition

Guidelines for Assisting with Administration of Medication

1. There must be a written, dated, and signed **physician's order** in the individual's record **before a DSP can assist** the individual with administration of any medication, prescription, or over-the-counter medication.

2. **Only one DSP** should assist an individual with medications at any given time. That DSP should complete the entire process. Never hand a medication to one individual to pass on to another.

3. **Always wash your hands** before assisting an individual with self-administration.

4. The DSP should **always prepare medication in a clean, well-lit, quiet area.** Allow plenty of time, avoid rushing, and stay focused. Check the Five Rights by reading the Medication Label and comparing to the Medication Log three times before the individual takes the medication.

5. **To avoid errors, it is recommended that the medications be set up immediately before assisting an individual with administration of medications.**

6. **DSPs should ask for help from the prescribing doctor or pharmacist** if he or she is unsure about any step in the preparation of, assistance with, or documentation of medications.

7. **Medication should never be disguised** by putting it in food or liquid.

8. **The DSP should always ask the physician (and pharmacist) to give the medicine in the proper form for the individual based on the individual's needs and preferences.** For example, one individual may have difficulty swallowing capsules and prefer liquid medication, while another may prefer capsules.

9. **Tablets should never be crushed** unless the prescribing physician has given specific directions to do so. **Capsules should not be opened** and their contents emptied out. Controlled release tablets can deliver dangerous immediate doses if they are crushed. Altering the form of capsules or tablets may have an impact on their effectiveness by changing the way an individual's body absorbs them.

10. **Read the medicine warning label, if any. It will give you important information about how the medication should be taken.**

ASK! ASK! ASK!
CHECK! CHECK! CHECK!