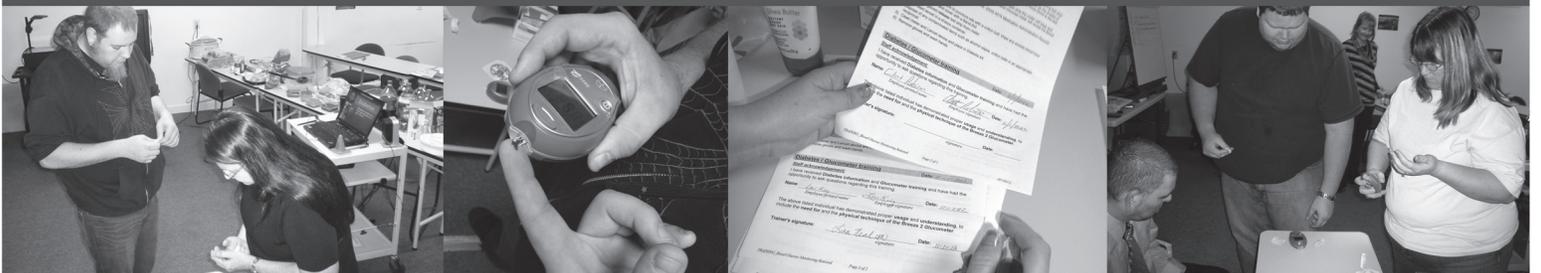


# State Operated Community Program Medication Administration Curriculum 2012





**Special note:**

This Medication Administration Curriculum focuses on understanding medications and medication administration.

References are made throughout this curriculum to both existing DHS State Operated Community Program (SOCP) documents and the Therap Services Electronic Documentation System.

For more help in completing various Therap Services<sup>®</sup> online documents, refer to the following reference guides:

***Therap Services<sup>®</sup> SOCP Reference Guide Medication Administration:***

- Medication Administration Records (MAR/TAR)
- Discontinuation of orders
- Medication irregularities
- Adding new orders
- Configure a MAR
- Appointments
- Health tracking

***Therap Services<sup>®</sup> SOCP Reference Guide:***

- Login
- T-Logs
- GERs
- Skin/wound
- Secure communication (SComm)
- Calendar

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## **Mission statements and DHS core values**

### **Oregon Department of Human Services (DHS) mission**

To help Oregonians in their own communities achieve well-being and independence through opportunities that protect, empower, respect choice and preserve dignity.

### **Aging and People with Disabilities (APD) mission**

Helping seniors and people with disabilities of all ages achieve well-being through opportunities for community living, employment, family support, and services that promote independence, choice and dignity.

### **State Operated Community Program (SOCP) mission**

The State Operated Community Program (SOCP) is dedicated to providing the support necessary to maintain the quality of life, achieve the highest possible level of independence and promote social opportunities that benefit the individual and the community.

## **DHS core values**

### **Integrity**

We maintain the highest standards of individual and institutional integrity.

### **Stewardship**

Because all Oregonians have a stake in the actions of public sector employees, we are accountable in action and attitude for this stewardship of the public trust.

### **Responsibility**

We take responsibility for our actions.

### **Respect**

We respect the dignity and the diversity of our colleagues, communities and people we assist.

### **Professionalism**

We maintain the highest standard of professionalism

## **Innovation**

We strive to be smarter/faster/better in all things, as we continuously and intentionally seek to improve the work we do and the ways in which we do it.

## **Service equity**

We build upon our existing core value of respect to ensure that everyone interacting with our customers and with each other guarantees fair treatment, access, opportunities, advancement and inclusion.

## **Introduction: Course expectations and staying current in SOCP medication administration**

**Desired outcome:** All employees working in the homes demonstrate competency in the area of medication administration.

### **Why we have medication administration training?**

We want you to be successful at your job. The more you understand about and know how to use the medications taken by the people you serve, the better you will be equipped to perform your job.

- Many individuals need prescribed medications to fully benefit from a high quality of life in their homes and communities.
- Caregivers may not be familiar with some of the medications that the licensed clinicians prescribe.
- All medications/treatments, including treatments available over the counter without prescription, can have undesired effects or cause rare responses in some people.
- All medications are potentially dangerous and no medication is absolutely safe.
- Knowing how to correctly document medication administration requires training and practice.

In addition to protecting the health and well-being of the individuals you support, your knowledge of appropriate procedures for administering medications will protect you and the SOCP from faulty medication practices, which may have serious consequences (i.e., hospitalization, giving the wrong medication to people, etc.).

## **Requirements to remain current in medication administration**

All new employees will receive medication administration training and must demonstrate competency within the first 120 days of employment by:

1. Attending the initial Medication Administration Training course offered through the Central Training Unit and obtaining an 85 percent or better grade on the written test.
2. Administering medication while being observed by the site manager/HSS or house trainer. That person may identify further supports needed in medication knowledge or administration.

After completing the initial competency-based training, each employee must attend a Medication Administration course every two years. This will be done through the Central Training Unit with the following options:

1. A one-day Medication Administration Refresher class — recommended for staff that pass medications on a daily basis and know medications and the transcription procedures;
2. A three-day initial Medication Administration class — recommended for staff that work in a medical home or staff that do not give medications on a regular basis.

Staff who score between 80 percent and 84 percent will be scheduled for a one-day Medication Administration Remediation class. Staff who score 79 percent and below will be scheduled for the three-day initial Medication Administration course.

Staff who do not receive a passing score of 85 percent or better will not be able to pass medications or perform treatments until they are current in medication administration.

1. Employees who, at the time of completing the Medication Administration Refresher course, have not exceeded the two-year period between trainings may, at the discretion of the site manager, continue to administer medications. The Medication Administration Observation must be completed within 15 days or before the two-year period has elapsed, whichever is less.
2. In the event an employee is unavailable to complete the Medication Administration Observation review within 15 days of course completion or prior to his or her expiration of approval, whichever comes first, the employee may not pass medications or perform treatments until the observation review is completed.

**This training does not include delegated duties. A delegated duty falls under the license of a registered nurse. An RN must train and sign off on any employee performing a delegated duty.**

## Lesson 1: Safe medication administration

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan. Staff should be able to:

1. List the seven rights of medication administration.
2. Identify the three documents necessary for safe medication administration.
3. Describe and demonstrate the three checks.

### Objective 1: The seven rights of medication administration

Safe administration of medication requires that the right **PERSON** receives the right **MEDICATION**, in the right **DOSE** (amount) by the right **ROUTE** (how it is to be given) and at the right **TIME**. The client always has the right to **REFUSE** the medication or treatment and staff will complete the right **DOCUMENTATION**. These are the **seven rights** of medication administration.

#### Right person

In order to make sure that you are about to administer medications to the right individual, you have to know the individual.

Even when you know the individual well, mistakes can happen. To reduce the risk of errors, do the following:

- Prepare medications for only one individual at a time.
- Compare individual's name on the MAR (**DHS 4573**; see **Appendix A**) to the name on the bubble pack. If they don't match, **STOP** and clarify.
- Give the medication to the individual as soon as you prepare it.
- Do not allow yourself to be distracted.
- Do not administer medication prepared by another individual.
- Document immediately as outlined in this manual (or in the **Therap Services SOCP Reference Guide Medication Administration**).

#### Right medication

Some of the new brand names can be very confusing, Many drugs appear in different formats, such as long-acting or slow-release, that can have quite different effects. In order to be sure that you are giving the right medication, you must do the following:

- Carefully read the medication label. Remember that some medications have more than one name — a brand name and at least one generic name.
- Carefully read the Medication Administration Record/Treatment Administration Record (MAR/TAR). Make sure that the medication name on the label, MAR/TAR and medication order match **before** giving the medication. If they do not match, or if there is any doubt that you are not giving the right medication, **STOP!**
- Look at the medication. If there is anything different about the size, shape or color of the medication, call the pharmacist **before** you give it. It could be that you have been given a different generic brand of the medication. But when a medication looks different, it sometimes means that you have been given the wrong medication.

### Right dose

The right dose is **how much** of the medication you are supposed to give the individual at one time.

- Make sure the numbers have the decimal point at the right place (*some pills are 0.1 mg and others 100 mg*) and the units (*e.g., milligrams or tablets*) are correct.
- To determine the dose, you need to know the **strength** of each medication.
- In the case of liquid medications, you need to know the strength of the medication in each liquid measure. The dose equals the strength of the medication multiplied by the amount.

### Example

<b>RX#:</b> 828291	<b>Town Pharmacy</b>	
	100 Main Street Pineville, OR 00000 503-000-0000	
<b>Jeff Smith</b>		
Valproic Acid 250 mg (Depakote)		
Take 2 tabs by mouth twice a day	Dr. B.J. Honeycutt	
<b>Lot#:</b> PS56721	<b>Exp. Date:</b> 01/01/07	<b>Refills:</b> 4

The **strength** of each Valproic Acid pill is 250 mg.

The **dose** is 500 mg twice a day.

Strength (*250 mg per pill*) X amount (*2 tabs*) = 500 mg.

## Right time

- Some medications must be administered only at very specific times of the day. For other medications, the time of day that you give the medication is less critical.
- It is very important for medication to be given at the time of day written on the medication order. If no specific time is written on the physician orders, use the times consistent with administration in your house as appropriate.
- Compare the time on the prescription label and the MAR/TAR. If they do not match, or if there is any doubt that you are giving the medication at the right time, **STOP!**
- **SPECIAL NOTES:** Medications must be given within one hour of the time listed on the MAR/TAR. This means you have one hour before and one hour after the medication is ordered to administer it. This **does not** apply to PRN medications. They must be administered as ordered. Follow **Addendum to Physician Orders, Medication Administration Irregularities, Physicain's Directions (DHS 4621)** if applicable in the event of a medication omission (see **Lesson 12, Objective 2**).

## Right route

- The route means how and where the medication goes into/or on the body. Most medications are taken into the mouth and swallowed, but others enter the body through the skin, rectum, vagina, eyes, ears or nose.
- Sometimes mistakes happen when you are giving several medications by different routes at the same scheduled time. Avoid mistakes by completing the administration of one route first (*e.g., eye drops*); put them away and wash your hands. Then administer the next medication (*e.g., ear drops*).
- If a route is not listed on the actual Physician's Visit Orders (DHS 4576), it can be added in parentheses to the MAR/TAR (DHS 4573) if you are sure of the route the health care provider intends. If you don't know for sure, you should contact the physician/pharmacist for clarification.

**Note:** Therap Services will automatically list a route when adding the medication using the drug look-up system.

## Right to refuse

- All individuals have the right to refuse the medications or treatments we offer them. Staff will document in the client Progress Notes or T-Logs and complete a Medication Incident Report (DHS 4630) or General Event Record (GER) and follow the Functional Assessment/Behavior Support Plan (DHS 4588), medical protocols and physician orders.
- If client refuses his or her medications/treatments, use the hour before and hour after designated time to try to administer them (see Special Notes under “Right time”).
- Ideas to help support and encourage your client to take medications are to have other staff offer to administer the medications, come back at a later time within the time frame stated above, follow the Behavior Support Plan, and the Addendum to Physician Orders (see Lesson 12, Objective 2).
- The **right to refuse** is not one of the rights checked when completing the three checks (see Lesson 1, Objective 3).

### **Right documentation**

- **See Therap Services SOCP Reference Guide and Therap Services SOCP Reference Guide Medication Administration.**
- The right documentation is not one of the rights checked when completing the three checks (see Lesson 1, Objective 3).

### **Objective 2: The three documents necessary for safe medication administration**

Before any medication may be administered, staff must have the following:

1. Licensed practitioner’s **order**;
2. Printed pharmacy **label**, or legible original label on over-the-counter medications or treatments;
3. Completed Medication Administration Record (**MAR**) or Treatment Administration Record (**TAR**) or Therap MAR.

A medical professional licensed to medically assess a patient, make a diagnosis and then prescribe medication and treatments writes the licensed professional's order. Professionals licensed under Oregon statute include:

- Clinical nurse specialists;
- Chiropractors;
- Dentists;
- Dietitians;
- Naturopaths;
- Nurse practitioners;
- Optometrists;
- Physicians;
- Podiatrists.

**◆ A licensed professional's order must include the five rights, signed and dated within the last 90 days (with the exception of a Telephone Order) and may include special directions to the patient.**

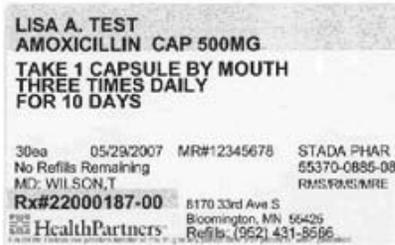
**◆ FYI: Electronic licensed practitioner's orders**

Electronic licensed practitioner's orders (E-prescribing) are beginning to replace the traditional handwritten order. Handwritten licensed practitioner's orders can be hard to read leading to serious medication errors.

E-prescribing is becoming the standard: the prescriptions are clear and easy to read and offer many built-in safety checks. They are frequently used in hospitals and emergency departments.

Electronic or computer-generated orders come in a variety of formats. Electronic prescriptions must include the five rights and be dated within the last 90 days. Be aware that sometimes the signature of the licensed practitioner is simply a number and not a written signature.

**Printed pharmacy labels and original labels on over-the-counter medications or treatments must be legible.**



**Pharmacy labels** must include the five rights.

1. Right individual (e.g., Lisa A. Test)
2. Right medication (amoxicillin)
3. Right dose (1 capsule = 500 mg)
4. Right route (by mouth)
5. Right time (three times daily)

Note: If the order does not specify a time, we may assign the times to our home's regular medication pass times. For example, we could assign this medication to be given at 8 a.m., 2 p.m. and 8 p.m.



**Over-the-counter (OTC) medications:**

- Requires a Physician's Visit Orders (DHS 4576);
- Must be left in the original container with the individual's name on it;
- Must exactly match the physician's visit orders.

Current Label



Proposed Label



**Over-the-counter (OTC) treatments:**

- Do not require a physician's order if they are being used for preventive use;
- Must be left in the original container with the individual's name on it;
- The order on the Treatment Administration Record (TAR) would be transcribed as written on the container.

## Completed Medication Administration Record (MAR) or a Treatment Administration Record (TAR)

The MAR is the form on which you will document that you have administered a medication. The TAR is the form on which you will document that you have administered a treatment.

You will compare the seven rights on the MAR or TAR against the label on the medication or the treatment.

MARs and TARs can be electronic or paper.

Paper copies of the current MAR/TAR are printed from the Therap Services website after they are configured (approved).

Any time changes occur a new MAR/TAR must be printed for back-up purposes. (See Therap Services: SOCP Reference Guide Medication Administration.)

### Objective 3: The three checks

Each time you give a medication, you must systematically and conscientiously match the **five rights** on the MAR or TAR and the label. This is essential **every time** you administer **any** medication — including medications that an individual has been taking for a long time.

Each time you give a medication, you need to remember to do the **three checks**.

# 3 checks

- **Check 1:** Remove the medication from the secure locked area and check the prescription label against the MAR/TAR to make sure they match.
- **Check 2:** As you remove the medication from the bubble pack/pour the liquid, etc., you again check the prescription label against the MAR/TAR. Document in the box on the MAR/TAR.  
**Note: MAR/TAR (DHS 4573)** – in Therap, click in the box for your initials to appear.
- **Check 3:** After the administration you again compare the prescription label to the MAR/TAR, ensure the medication has been popped out and initial the bubble pack.

The majority of medication errors within SOCP result from not performing these **THREE CHECKS**. When not done, the individual is at risk and you, as a medication administrator, are not doing your job. These are the most important steps to successful and safe medication administration.

## Objective 4: List the steps of the medication administration procedure.

The medication administration procedure is a step-by-step process that must be followed every time you administer medications to a client.

- Allow ample time to pull medications without distractions.
- Wash hands before and after medication administration.
- Assemble appropriate equipment (keys, medication cups, medication bubble packs, etc.).
- Perform the first two of the three checks:
  - **Check 1:** Remove the medication from the secure locked area and check the prescription label against the MAR/TAR to make sure they match.
  - **Check 2:** As you remove the medication from the bubble pack/pour the liquid, etc., you again check the prescription label against the MAR/TAR. Document in the box on the MAR/TAR. **Note: MAR/TAR (DHS 4573)** – in Therap, click in the box for your initials to appear.
- Return medication to the locked area.
- Identify the client.
- Administer the medications to the client.
- Perform the last of the three checks:
  - **Check 3:** After administering, again compare the prescription label to the MAR/TAR, ensure the medication has been popped out and initial the bubble pack.

## Lesson 2: Medication terminology

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan. Staff should be able to do the following:

1. Define the terms “brand name” vs “generic name.”
2. Define active ingredients and inactive ingredients.
3. Define controlled medication and non-controlled medication.
4. Define off-label uses.
5. Define as-needed (PRN) medications.
6. Describe routes of medications.
7. Describe the medication administration procedure.

## Objective 1: Brand name vs. generic name of medications

The name of medication is one of the five rights that you must know before administering a medication. A medication will have a **brand name** and a **generic name**.

The **brand name** is the marketing name chosen by the drug company that makes the medication. Brand names usually begin with a capital letter and may be followed by a trademark ®. A drug may have more than one brand name. Motrin and Advil are the brand names from different drug companies for the same medication (ibuprofen).

The **generic name** is the chemical name. Generic names are usually written beginning with a lowercase letter. They are generally less expensive.

Examples of trade and generic names:

<b>Brand</b>	<b>Generic</b>
Tylenol	acetaminophen
Prozac	fluoxetine
Depakote	valproic acid

❖ Why is this important?

The pharmacy can substitute a less expensive generic drug unless the physician orders no substitutions. If the drug name does not match the order, *you must investigate and correct all problems before you can proceed.*

## Objective 2: Active ingredients vs. inactive ingredients

Various ingredients make up medications. In a tablet of Tylenol, for example, acetaminophen is the actual chemical that will relieve pain or reduce a fever. Other ingredients are mixed in to form the tablet and to make it easy to swallow.

**Active ingredient** is the actual medication that produces the desired effect or benefit for which the medication is prescribed.

**Inactive ingredients** are added to the active ingredient to improve the drug's appearance, make the drug easy to swallow, and/or improve the taste. Inactive ingredients may be flavors, dyes or water.

### Objective 3: Define controlled and non-controlled medications.

A controlled medication is a medication the Food and Drug Administration (FDA) considers to be potentially abusive or addictive.

Controlled medications are also called scheduled drugs. A Roman numeral between I and IV is assigned to each drug (I for the most potential for abuse to IV for the least potential for abuse).



Controlled medications are packaged with a symbol that shows the abuse potential. Usually this is a red C.

Controlled medications require a renewal by the licensed clinician to fill every 90 days.

Controlled medications must be accounted for as changes occur and between all shifts using the **Individual Narcotic Count Sheet (DHS 4570)** (see Lesson 9, Objective 2).

**Non-controlled medication** is medication that is not considered addictive or potentially abusive. Most of the medications you will administer — including many psychiatric medications, OTC medications and treatments — are non-controlled.

### Objective 4: Labeled and unlabeled (off-labeled) use

When a drug company develops a new medication, it is tested to be sure that it is safe and effective in treating the illness or disorder it was designed to treat. If it is found to be safe (after multiple studies), it can then be approved by the Food and Drug Administration (FDA) for a certain use.

**Labeled use:** This means using the medication for a purpose that has been approved by the FDA. Drug reference books will tell you the approved or labeled use for a medication, *e.g., Benadryl being used to treat allergic reaction symptoms such as itchy watery eyes, rash and nasal congestion.*

**Unlabeled use:** This is using the medication for a purpose that the FDA has not approved, *e.g., Vicks Vapor Rub being used for toenail fungus.*

## **Objective 5: As-needed or PRN (pro re nata) medications**

PRN medications are often used to provide short-term relief of mild to moderate symptoms. Many times these are medications that are available over-the-counter (non-prescription) for people outside a facility to use without a specific diagnosis. Other PRN medications by prescription are used to relieve the symptoms of a known condition.

- PRN medications may be given for specific physical complaints they might relieve, such as pain or nausea. Note: They relieve the symptoms (fever) rather than treat the illness (flu) causing the symptom.

*E.g., someone who has had recent surgery or an injury taking pain medication as needed while he or she recovers.*

- Oregon regulations do not allow psychotropic medications to be prescribed as a PRN.

Psychotropic medication cannot be administered on a PRN basis without ISP team approval, guidelines written into the individual's ISP and an approved variance from DHS Licensing and Certification for adult services and DHS Licensing and Certification for children.

## **Objective 6: Routes of administration**

The route means how and where the medication goes into or on the body. Most medication is taken into the mouth but some enter the body through the skin, rectum, vagina, eyes, ears or nose. Medication can be swallowed, inhaled, dropped, sprayed, applied, inserted, absorbed or injected.

- Oral — For the mouth or by mouth (PO). To be swallowed or absorbed.
  - Sublingual — To be absorbed under the tongue.
  - Buccal — To be absorbed in the cheek cavity.
- Gastrostomy tube (G-tube) — A tube surgically placed into the stomach as an alternate oral route. Only crushed and liquified medications can be placed in the tube. A nurse must delegate staff to administer medications via this tube.
- Jejunostomy feeding tube (J-tube) — A tube surgically placed into the lower small intestine as an alternate oral route. Only crushed and liquified medications can be placed in the tube. A nurse must delegate staff to administer medications via this tube.
- Ophthalmic — Eye drops and eye ointment. To be applied in the eye or on the lower eyelid.
- Otic — For the ears. To be applied into the ear canal.

- Nasal — For the nose. To be dropped, sprayed or inhaled into the nose.
- Inhaled — For the lungs. To be breathed in to treat breathing problems such as asthma.
- Topical — For the skin. To be applied by rubbing in a circular motion or applying a patch. Medication is absorbed through the skin into the blood stream.
- Suppository — For the rectum or vagina. Medication is inserted into the body cavity to be absorbed through the mucus membranes.
- Injections — To be given through the skin. An RN may train you on medications you are required to inject, such as Epi-Pens and glucagon.
  - Intermuscular — Through the muscle tissue.
  - Subcutaneous — Given into the layer between the skin and the muscle.

The route of administration will affect how quickly a medication is absorbed and distributed. Inhaled medications are absorbed within seconds into the blood vessels in the lungs. Oral medications generally take approximately 30 to 60 minutes to be absorbed from the stomach or intestine into the blood stream. Topical treatments may take hours to be absorbed through the skin.

### **Lesson 3: Know the medications.**

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

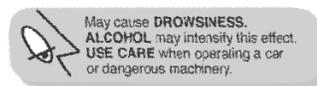
1. Identify name, action, usual dosage, side effects and precautions of medications.
2. Know the process that must occur in the body for a medication to have an effect.
3. Know the side effects a client may have to a medication.
4. Identify medications' possible interactions.
5. Identify allergic reactions or anaphylaxis.
6. Know the commonly used medical abbreviations.

#### **Objective 1: Identify name, action, usual dosage, side effects and precautions of medications.**

To safely administer medications, you must know the following information about the medications you will administer:

- **Medication's name:** A medication will have a trade name and a generic name. The medication name is one of the five rights of administration.

- **Medication's use and action:** The use and action tell you what conditions or illnesses the medication treats and how that medication is expected to help the client. *E.g., the use for an antibiotic is to treat infection caused by bacteria. The action of the antibiotic is to destroy the bacteria that is causing the illness.*
- **Controlled or non-controlled:** Remember that a controlled medication is a medication that may be abused or addictive. Two staff from the same shift must count controlled medications at the following times: at the beginning of the shift, if they administer these medications, if they need to dispose of these medications, if they receive more of these medications on your shift, and at the end of the shift.
- **Usual dose:** The usual dose is how much medication is considered safe and effective to treat a particular condition or illness. You can find this information in a current drug reference book, online or through the Therap drug look-up. Most medications have a range of doses considered to be safe. Doses are usually measured in milligrams (mg).
- **Medication side effects:** All medications have the potential to cause side effects. No medication is absolutely safe and some are potentially dangerous. You must know and be alert for side effects. You must immediately notify your site manager or nurse if you notice anything unusual or the client complains of unusual side effects. The more quickly a side effect is reported, the more quickly the client can be evaluated and long-term problems may be prevented.
- **Precautions and special considerations:** Precautions and special considerations are steps that you should take to protect the client's safety and help the client get the most benefit from the medication. You can help prevent side effects by following the medication's precautions. Pharmacists place stickers on medication containers with precautionary measures that should be followed to ensure safe medication administration.



**Objective 2: Describe the process that must occur in the body for a medication to have an effect.**

For any medication to have an *effect*, it must *enter* the body and be *absorbed, distributed, metabolized* and then *eliminated* from the body.

1. Medications must **enter** the body.
  - a. An oral medication, tablet, caplet, capsule or liquid must be swallowed.

- b. A topical treatment such as a patch, cream or ointment enters the body through the skin.
2. Medications then are **absorbed** into the bloodstream.
  - a. Oral medications are absorbed into the bloodstream from the mouth, stomach and intestines.
  - b. Topical treatments are absorbed through the skin into the capillaries (tiny blood vessels) near the skin surface.
3. **Distribution** of the medication occurs once it enters the bloodstream and is transported throughout the body.
4. **Metabolism** is the way the body breaks down and changes the medication so it can be more easily eliminated. **Metabolism** of medication usually occurs in the liver.
5. The metabolized medication is **eliminated** from the body, usually through the kidneys and into the urine.

A problem with any of the above steps may affect how well the medication works and if the individual can safely take the medication.

**Example 1:** If the individual has a digestive disorder, the body may not be able to absorb the medication properly; therefore, the medication would not be fully effective.

**Example 2:** If the individual has a liver disease such as hepatitis or cirrhosis, the body would not be able to metabolize the medication as well. Therefore, the medication would not be fully effective.

**Example 3:** If the individual has a kidney disease or kidney dysfunction, the body would not be able to eliminate the medications. Therefore, the individual could become over-medicated or toxic.

### **Objective 3: The effects and interactions of medication**

Once a medication enters the body and is absorbed, it will have some type of response or **effect**. There are three types of effects that a medication may have:

- Desired (therapeutic) effect;
- No effect;
- Unwanted effect (side effect).

Medication can have interactions with other medications, foods or beverages that may affect the effect of the medication.

1. **Desired (therapeutic) effect** — The medication worked the way it was intended.

**Example:** Penicillin was prescribed for strep throat. The individual no longer complains of a sore throat and the temperature has returned to normal range.

*Remember some medications are ordered for off-label uses so the desired effect may be different than the one described in the **Pill Book** or other medication reference sources.*

2. **No effect** — The medication did not work as it was supposed to. **Example:** Diphenhydramine is ordered for sleeping difficulty but the individual continues to wake up every two hours throughout the night.
3. **Unwanted effect (side effects)** — This includes any response to medication that is not the desired effect. It can range from mild to severe. All medications have the potential to cause harm.

*It is the responsibility of all medication trained staff to be aware of the possible side effects of each medication that your individuals receive.*

Mild side effects may be expected, especially when the individual starts taking a new medication. While they may be unpleasant, these effects will often go away after a period of time as the body adjusts to the medication.

**Example:** Lorazepam ordered for anxiety may cause some drowsiness until the body adjusts to the medication.

More serious side effects, sometimes called **adverse reactions**, are unexpected and may be life-threatening.

### Medication side-effects

Some undesired effects grouped by affected part with common medications that might be the cause:

Side effect	Medication/s that may cause effect
<b>Skin</b>	
Hives (raised blebs/welts/ itching)	Many
Rashes	Many, especially anti-seizure meds
Increased sweating	Ritalin <sup>®</sup>
Decreased sweating	Haldol <sup>®</sup> , Zyprexa <sup>®</sup> , lithium
Acne	Prednisone
<b>Digestive system</b>	
Diarrhea	Most medications

Nausea/vomiting Side effect	Most medications
Heartburn Gum/teeth problems Dry mouth GER	Anti-inflammatories (ibuprofen, naprosyn) Phenytoin (Diltantin <sup>®</sup> ) Antihistamines (Benadryl <sup>®</sup> , etc.) Antibiotics, psychotropics
<b>Nervous system</b>	
Dizzy/lightheaded	Many
Seizures	Wellbutrin™, other antidepressants
Muscle tightness/ abnormal movements	Antipsychotics (thorazine, Haldol <sup>®</sup> )
Tics	Methylphenidate (Ritalin <sup>®</sup> )
Hallucinations/delusions	Many
Agitation	Prozac <sup>®</sup> , Zoloft <sup>®</sup> , Ritalin <sup>®</sup> , amphetamines
Sleepiness	Antidepressants, antipsychotics, antihistamines, narcotics
Malaise (feeling ill or "out of it," unpleasant sensations)	Antibiotics
<b>Respiratory system</b>	
Irregular breathing	Prozac <sup>®</sup>
Wheezing	Many
<b>Cardiovascular system</b>	
Fainting	Blood pressure medications
Irregular pulse (faster/slower)	Ritalin <sup>®</sup>
<b>Blood</b>	
Easy bruising	Aspirin or anticoagulants
Low red cell counts (anemia)	Anti-inflammatories
Low white cell counts	Valproate (Depakote <sup>®</sup> ), carbamazepine (Tegretol <sup>®</sup> )
<b>Endocrine (hormones)</b>	
Menses changes	Birth control pills
Hair growth	Prednisone
Hair loss	Prednisone
Thyroid problems	Lithium
<b>Urinary system</b>	
Trouble voiding	Medication/s that may cause effect Antihistamines, older antidepressants

## Side effect

### General / constitutional

Decreased appetite/weight loss	Amphetamine (Adderal <sup>®</sup> )
Increased appetite/weight gain	Prozac <sup>®</sup>
Fever	Antibiotics
Muscle cramps	Blood pressure medications, lithium
Itch	Narcotics, especially Demerol <sup>®</sup>

### Special senses

Vision changes

### Examples of serious side effects or adverse reactions include the following:

- Allergic reactions;
  - Twitches or tics, changes in gait or difficulty walking;
  - Severe drowsiness or decreased alertness;
  - High fever.
- 4. Allergic reactions** — These are serious side effects. Signs of an allergic reaction include the following:
- Rashes or hives on the skin;
  - Watery eyes, runny nose;
  - Wheezing and coughing;
  - Difficulty swallowing;
  - Difficulty breathing.
- 5. Anaphylaxis reactions** — Anaphylaxis is a severe, potentially fatal allergic reaction. It is a **MEDICAL EMERGENCY!**
- Anaphylaxis affects the entire body. It can start within seconds of exposure to a medication, food, insect bite or other allergen.
  - Symptoms may quickly progress. The individual may first feel anxious and itchy. A rash and swelling on the face and body sets in. Finally, constriction of the airway from swelling of the throat and difficulty breathing develops. Respiratory failure (inability to breath) may soon follow.
  - This is an **emergency situation**. Call 911 and follow the operator's instructions.
  - If the individual has an epinephrine auto-injector (Epi-Pen) it should be administered as trained.

**6. Medication interactions** — Medications can interact with other medications. Taking multiple medications at the same time may result in a medication interaction. The licensed practitioner must know what other medications the individual is prescribed including any herbal or alternative medicine preparations

**Example:** Maalox decreases effectiveness of tetracycline because Maalox reduces stomach acid and tetracycline needs stomach acid to be absorbed.

**7. Food interactions** — Food may interact with medications by affecting the absorption process. Food changes the acidity (pH) of the stomach.

The pH of the stomach affects the absorption of medications. When a medication must be administered on an empty stomach, the medication should be given one hour before a meal or two hours after a meal.

**Example:** Grapefruit juice should not be given with certain medications as it inhibits the proper absorption of fat. Some medications are fat-soluble.

*Staff are best able to observe and report any and all suspected effects of medications*

## Objective 4: Common medical abbreviations

Medical abbreviations can be easily misunderstood or have more than one meaning. Therefore, the use of abbreviations is discouraged, but licensed practitioners will often use abbreviations when they write orders. Staff must know these abbreviations so that they can understand and follow the licensed practitioner's orders.

### Abbreviation examples:

Administration		Doses	
Q	Every	GM or gm	Gram
QD	Every day	mg	Milligram
QOD	Every other day	cc	Cubic centimeter
Q4h or Q4 <sup>o</sup>	Every 4 hours	tsp	Teaspoon
Q6h or Q6 <sup>o</sup>	Every 6 hours	Tbsp	Tablespoon
QID	4 times daily	tab	Tablet
BID	Twice a day	Cap	Capsule or caplet
TID	3 times daily	gtts	Drops
HS	Hour of sleep		
Hr	Hour		
PRN	As needed		
@	At		

Routes	
PO or P.O.	By mouth
NPO	Nothing by mouth
GT	G-tube
Vag	Vaginal cavity
PR or rect	Rectal

Miscellaneous abbreviations			
BP	Blood pressure	c	With
Tx	Treatment	s	Without
Rx	Prescription	NKA	No known allergies
D/C or d/c	Discontinue	NKDA	No known drug allergies
c/o	Complaint of	Wt.	Weight
X	Times	WNL	Within normal limits
↑	Increase	i	One
↓	Decrease	ii	Two
Oint	Ointment	iii	Three

## Lesson 4: Observing and reporting

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Identify each level of notification.
2. Describe appropriate documentation for each level.

All staff are responsible for observing and reporting physical and behavioral changes. The caregiver's job is to watch for and report changes. You are responsible for noting changes, **not** for determining if the changes you see are actually the result of a given medication.

Following are the three levels to report — from most severe and urgent to the least severe—and the action to take:

- **Level 1:** Health emergencies — IR or GER must be completed.
- **Level 2:** Non-emergency, possibly health-threatening conditions — IR or GER may be completed.
- **Level 3:** Other notable conditions — IR or GER would not necessarily be completed.

### Definitions:

**Emergency** — A serious situation or occurrence that happens unexpectedly and demands immediate action. A condition of urgent need for action or assistance.

**Mental status** — A person's mood and the way he or she appears to be thinking and feeling. Medications may cause mental status changes or other behavioral effects, especially when medication interactions occur.

**Notification system** — The phone tree system to notify administration of emergency medical or behavioral situations or areas of concern.

### Objective 1: Level 1 — Health emergencies

Examples	
<i>(These are standard CPR/first-aid issues)</i>	
<ul style="list-style-type: none"><li>• Sudden widespread hives, especially if there is facial swelling;</li><li>• Seizures — new, prolonged or suspected injury;</li><li>• Breathing difficulty;</li></ul>	<ul style="list-style-type: none"><li>• Rapid pulse or fainting or decreased level of consciousness;</li><li>• Marked weakness, especially on one side of the body;</li><li>• Marked behavior change;</li></ul>

- Disorientation;
- Severe pain;
- Inability to stand or walk;
- Medication errors if life-threatening;
- Uncontrolled bleeding;
- Change in mental status;
- Compound fractures.

***When and to whom to report the health emergency:***

- Immediately. Call local emergency number: 911.
- Provide first aid if necessary until help arrives.
- Follow directions from emergency personnel during contact phone calls. Do not hang up.
- Call Poison Control (for accidental ingestions): 1-800-222-1222 (now a single national number, easily remembered, reaches your closest center). Usually 911 will give you direction to call when appropriate.

***After all emergencies:***

- Call the site manager/program manager to report what happened as soon as possible after the crisis/emergency.
- If no answer, leave this message: “This is an emergency. Call back immediately.” Give your name, the house you are calling about and the callback number.
- Follow up with the completion of the following:
  - **Incident Report ( DHS 4595, 4595A, 4595B, 4595C and/or 4595D) or a Therap GER;**
  - **Daily Log/Shift Report ( DHS 4629) and Progress Notes (DHS 4596) of the individual or Therap T-Log.**
- The person writing the Incident Report/GER should document what he or she observed rather than recording impressions or suspicions!
- If individual has a nurse-client relationship established, report to the nurse and inform the site manager.

**Objective 2: Level 2 — Non-emergency, possibly health-threatening conditions**

Over a period of time (*hours or a shift, etc.*), you may have been observing a non-emergency **but** possible health-threatening condition that is not resolving itself with usual medical interventions. This change is unusual for the individual.

## Examples

- A fever that is not reduced by PRN medication;
- Change in bowel habits;
- A persistent sore throat;
- A rash that lasts for several days or appears to be getting worse;
- A change in the type of seizure an individual typically experiences;
- Ingesting something (*dish soap, laundry detergent, etc.*) where you need to call Poison Control;
- Missing controlled medications;
- An increase in seizure activity;
- Repeated episodes of anger or behavior, which may be manageable, but are not typical for the person;
- Other behavior changes that are out of character as you have come to know them;
- Unusual refusal to take prescribed medications;
- Unusually withdrawn behavior on the part of a person who ordinarily has frequent interactions with others;
- Medication errors that are not life-threatening.

### ***When and to whom to report the emergency:***

- Report to the site manager if deemed necessary, using a level 2 response/notification procedure that requires a response within one hour.
- If no answer, leave this message: “This is a level 2. Please call back within an hour.” Leave your name, the house you are calling about, the time you are calling and a callback number.
- Make an appointment with the doctor as soon as possible after the ongoing condition or change is observed/ noted.
- Document on an Incident Report (DHS 4595), in the Daily Log/Shift Report (DHS 4629), and on the individual’s Progress Notes (DHS 4596) or Therap GER and T-Log).
- *When in doubt, document.*

### Objective 3: Level 3 — Other notable changes

#### Examples of things to report:

- Anything that could be significant;
- Unexplained bruises;
- Upset stomach;
- Missing non-controlled medication;
- Documentation errors;
- Change in sleep patterns;
- A slight rash without change in medications;
- Anything out of the ordinary, especially if medications were recently changed.

#### *When and to whom to report:*

- As soon as possible after the condition is observed, notify the site manager if deemed necessary and visit a physician when it is recommended.
- If no answer, leave this message: “This is a level 3. Please call back by the end of the shift.” Leave your name, the house you are calling from, a callback number and a short message about the situation.
- Document changes noted in individual’s Progress Notes or T-Log.
  - If a significant change in condition is noted, complete an Incident Report or GER. All unexplained injuries (including bruising) must have an Incident Report or GER.
- Document in the Daily Log/Shift Report (if used by home) and continue reporting as needed for other shifts to review.

### Lesson 5: Asthma medications

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Describe the three physical changes in the lungs of people with asthma.
2. List the common triggers or causes for an asthma attack.
3. Identify the common signs and symptoms of an asthma attack.
4. List the components of an asthma management plan.
5. Identify the two general types of asthma medication.
6. Identify the asthma rescue medication and how it helps relieve an asthma attack.
7. Describe the types of asthma prevention or management medication and how they help an individual manage asthma.

8. Demonstrate the correct way to administer a metered-dose inhaler (MDI).

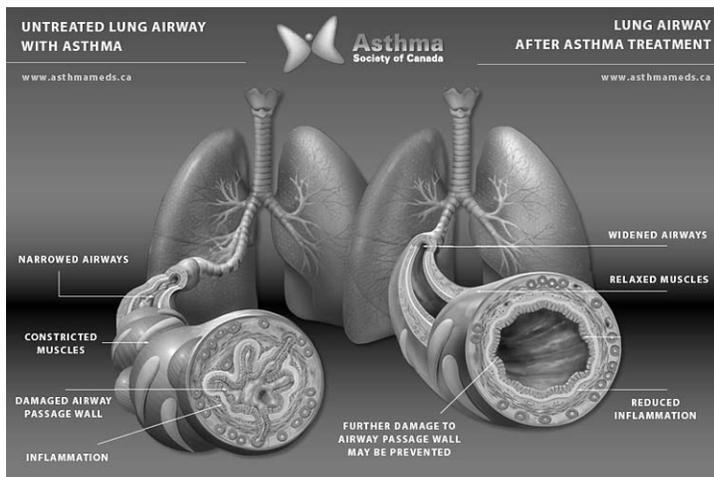
## Objective 1: Physical changes of asthma

Asthma is a common illness that causes breathing problems for many individuals. For most, asthma can be kept under control with medication and by avoiding what triggers their asthma.

Individuals with asthma experience physical changes in their lungs or airways that can make breathing difficult. These changes are:

1. **Bronchial constriction** — The airway tubes tighten, making the airway smaller so that less air can move in and out.
2. **Inflammation** — The lining of the airway becomes inflamed and swells. This swelling further blocks the already tightened airway, making breathing even more difficult.
3. **Increased mucous** — The inflammation fills the airway with more mucous than usual, which clogs the airways even further.

*When you are caring for an individual with asthma you should know what triggers an asthma attack for that individual and avoid those triggers.*



## Objective 2: Common triggers

Individuals with asthma may be very sensitive to triggers or causes in the environment that make their airways begin to constrict, become inflamed and increase the mucous in their lungs. Common triggers include:

# Asthma Triggers



### Objective 3: Common signs and symptoms of asthma

An individual who is having an asthma attack may have one or more of the following signs or symptoms:

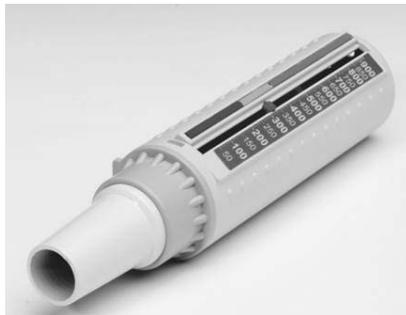
- Shortness of breath;
- Chest tightness;
- Wheezing;
- Difficulty breathing;
- Coughing;
- Chest and neck retractions.

An asthma attack  
can be life-  
threatening

### Objective 4: The asthma management plan

There is no cure for asthma, but there are many things that can be done to manage it. The individual's licensed practitioner can develop an asthma management plan to help keep the symptoms under control and perhaps prevent asthma attacks. The plan may include:

- The individual's specific triggers and suggestions on how to avoid them;
- Monitoring the individual's breathing capabilities with a peak flow meter;
- Prevention or management medications such as Advair diskus to keep the asthma under control;
- Emergency or rescue medications such as albuterol MDI to treat asthma attacks if they occur.



### Objective 5: Types of asthma medication

There are two general types of asthma medications:

1. **Rescue medications** — used to treat an asthma attack when the individual's airway is being constricted and breathing becomes more difficult;

2. **Prevention or maintenance medications** — used every day to help keep the inflammation and mucous under control so that the individual can breathe easily. Some prevention or maintenance medications are a combination of two different medications for better effect.

**Rescue medications/inhaled bronchodilators** — used to relax the muscles that line the airways. These are quick-acting rescue medications used to stop an asthma attack.

**Examples of inhaled bronchodilators:**

- Ventolin
- Proventil HFA
- Albuterol

**Possible side effects:**

Restlessness, anxiety, complaints of feeling “jumpy,” shakiness, dizziness, fast heartbeat.

**Special considerations when administering inhaled bronchodilators**

- Bronchodilators are usually administered by a metered-dose inhaler (MDI) and provide rapid relief.
- **If symptoms of the asthma attack do not quickly improve within a few minutes, follow your asthma protocol for emergency procedures.**

**Prevention or management medications** — used daily even if the individual is feeling well. They keep the asthma symptoms under control and may help prevent asthma attacks. These medications include:

- Inhaled steroids;
- Intal (cromolyn sodium);
- Leukotriene antagonists;
- Oral steroids;
- Other medications.

These medications work to reduce inflammation and swelling in the airway. They should never be stopped without a licensed practitioner’s order.

**Inhaled steroids** — used to reduce and prevent airway swelling, inflammation and mucous to reduce the chance of an asthma attack.

**Examples of inhaled steroids:**

- Vanceril, Beclovent
- Flovent (fluticasone)
- Azmacort (triamcinolone)
- Pulmicort Turbuhaler, Rhinocort

*Asthma management medications do not stop an asthma attack.*

**Possible side effects:**

- Mouth and throat irritation and infections.

**Special considerations when administering inhaled steroids:**

- If the individual receives an inhaled bronchodilator and an inhaled steroid medication at the same time, administer the bronchodilator first.
- Rinse mouth with water after inhaled steroids to prevent mouth/throat irritation or infection.

**Intal (cromolyn sodium)** — used to reduce inflammation in the airways.

**Possible side effects:**

Headache, dizziness, bad taste in mouth.

**Special considerations:**

- **Nasalcrom (cromolyn sodium)** is a nasal spray used to treat allergies. Be sure to administer the correct medication by the correct route.
- **Cromolyn sodium** may be administered by MDI or through a nebulizer.

**Leukotriene antagonists** — are used to prevent airway constriction and inflammation. They are oral tablets taken every day.

**Examples of leukotriene antagonists:**

- Accolate (zafirlukast)
- Singulair (montelukast)

**Possible side effects:**

Fatigue, headache, nausea, diarrhea.

**Special considerations:**

- To be effective leukotriene antagonists must be administered every day.

**Oral steroids** — are powerful medications to reduce inflammation when asthma symptoms are especially severe.

**Examples of oral steroids:**

- Deltasone (prednisone)
- Prelone (prednisolone)

**Possible side effects:**

Nausea and vomiting, headache, fluid retention, weight gain, nervousness, mood and personality changes such as euphoria and depression.

**Special considerations:**

- Oral steroids should be prescribed for short periods of time.
- Oral steroids should be tapered off and not suddenly stopped. Precisely follow the licensed practitioner's instructions.

**Other asthma medications** — use combinations of two medications in one inhaler or have medications that help keep airways open to help control the asthma. These medications **are not rescue** medications. They are administered daily through diskus or aerolizer inhalers.

**Examples:**

- **Advair (fluticasone propionate and salmeterol xinafoate)** — a combination medication that controls inflammation and helps keep the airways open. This medication is administered through a diskus inhaler.
- **Serevent (salmeterol)** — a prevention medication that helps keep the airways open. It is administered with a diskus inhaler.



Diskus inhaler



Aerolizer inhaler

- **Foradil (formoterol fumarate)** — a prevention medication that helps to keep the airways open. It is administered through an aerolizer inhaler.

## Objective 6: How to administer a metered-dose inhaler (MDI)

<b>Steps for using your inhaler:</b>	
Using an inhaler seems simple, but most patients do not use it the right way. When you use your inhaler the wrong way, less medicine gets into your lungs.	
<b>Getting ready:</b>	
<ul style="list-style-type: none"><li>• Take the cap off the inhaler and shake.</li><li>• Breathe out all the way.</li><li>• Follow your doctor's instructions to hold your inhaler (see picture A or B below).</li></ul>	
<b>Breathe in slowly:</b>	
<ul style="list-style-type: none"><li>• As you start breathing in <b>slowly</b> through your mouth, press down on the inhaler <b>one</b> time (if you use a holding chamber, first press down on the inhaler). Within five seconds, begin to breathe in slowly.</li><li>• Keep breathing in <b>slowly</b>, as deeply as you can.</li></ul>	
<b>Hold your breath:</b>	
<ul style="list-style-type: none"><li>• Hold your breath as you count to 10 slowly, if you can.</li><li>• Wait about one minute between puffs.</li></ul>	
Use your inhaler in one of the two ways pictured below:	
<b>A. Hold inhaler one to two inches in front of your mouth (about the width of two fingers).</b>	<b>B. Use a spacer/holding chamber. These come in many shapes and can be useful to any patient.</b>
	
<b>Additional important information:</b>	
Clean your inhaler as needed: Look at the hole where the medicine sprays out from your inhaler. If you see "powder" in or around the hole, clean the inhaler. Remove the metal canister from the L-shaped plastic mouthpiece. Rinse only the mouthpiece and cap in warm water and let them dry overnight. In the morning, put the canister back inside and put the cap on the inhaler.	

## Lesson 6: Medications used to treat medical conditions

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Identify the use and special considerations for antibiotics.
2. Identify the use and special considerations for antiviral medications.
3. Identify the use for scabicide and pediculocide medications.

4. Identify the use and special considerations for antifungal medications.
5. Identify the use and special considerations for the following medications:
 

Analgesics	Antipyretics
Expectorants	Antitussives
Decongestants	Antihistamines
6. Identify the use and special considerations for cardiovascular medications.
7. Identify the use and special considerations for anticonvulsant medications.
8. Identify the use and special considerations for medication that treat digestive disorders. These medications include:
  - a. Laxatives
  - b. Antacids
9. Identify the different types of hormone and/or birth control medications.

This lesson gives a brief description of some common illnesses and reviews some of the medications that may be prescribed to treat an infection and the symptoms of illness and injury. While many of these medications are available over the counter, you must have a licensed practitioner's order to administer any oral medications to your clients. You must be aware of possible side effects and follow the special considerations. Watch for any changes in the individual's behavior, activity, ability to participate in daily living skills, as well as changes in his or her overall well-being.

### **Objective 1: Antibiotics**

Used to treat infections and illness caused by bacteria.

#### **Examples of common bacterial illnesses:**

- Strep throat
- Ear infections (otitis media)
- Lyme disease
- Sinus infections
- Pneumonia
- Bronchitis
- Gonorrhea

#### **Examples of antibiotics:**

- Pen V.K., Amoxicillin, Augmentin – **penicillins**
- Doxycycline, Achromycin – **tetracyclines**
- E mycin, Erythrocin, Zithromax, z-pack – **erythromycins**
- Keflex, Ceftin, Suprax – **cephalosporins**
- Cipro – **fluoroquinolone**

**Possible side effects:**

Nausea, rash, dizziness, vomiting, headache, restlessness, diarrhea and yeast infections

*You must know the specific side effects of any antibiotic you administer.*

**Special considerations:**

- An antibiotic is designed to destroy specific bacteria. The licensed practitioner will prescribe the most effective antibiotic.
- Allergies to antibiotics are common. Watch for signs of allergic reaction when administering antibiotics.
- The entire prescription must be finished as ordered even if symptoms go away.
- Some antibiotics must be stored in the refrigerator. Follow the pharmacy instructions about storing the antibiotics.
- Follow any specific instructions from the licensed practitioner or the pharmacist about administration with food.
- Antibiotics may reduce the effectiveness of birth control medications.

**Objective 2: Antiviral medications**

Used to reduce the symptoms of viral illnesses.

*The body can fight off most viral infections such as the common cold and flu. There are vaccines to prevent many viral infections such as the flu, hepatitis and the mumps.*

**Examples of common viral illnesses:**

- Common cold
- Hepatitis
- Influenza (the flu)
- Mononucleosis
- Herpes
- HIV/AIDS

**Examples of common antiviral medications:**

- Tamiflu (oseltamivir)
- Zovirax (acyclovir)
- AZT, Retrovir (zidovudine)
- Valtrex (valacyclovir)
- Symmetrel (amantadine)

**Possible side effects:**

Dizziness, nausea, vomiting and diarrhea.

## Special considerations for antiviral medications:

- There are no medications that will cure a viral infection. Antiviral medications may help reduce the symptoms or how long the viral illness lasts by preventing the virus from multiplying so that the illness is less severe and has a shorter duration.
- Starting antiviral medications at the earliest sign of a viral infection provides the greatest benefit.

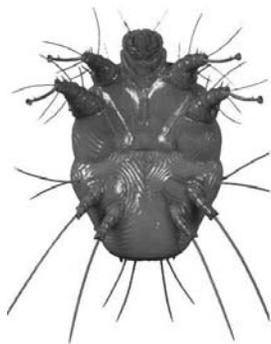
**Antiviral medications treat the symptoms of a viral infection. They do not cure a viral infection.**

## Objective 3: Scabicides and pediculocides

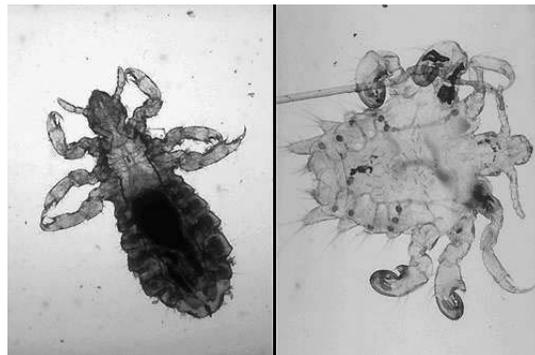
Used to treat scabies and lice infestations.

### Scabies and lice

Scabies and lice infestations are common and are not an indication of a person's cleanliness or overall health. Scabies and lice can be passed from person to person fairly easily, which makes it important to promptly and correctly treat any infestation. The scabies medications are applied to the skin and lice medications are applied to the hair. They must be used carefully according to a licensed practitioner's order. For complete lice treatment, it is necessary to comb out the lice eggs, or nits, to help prevent a re-infestation.



**Scabies mite**



**Lice**

Scabies are a mite somewhat like ticks or spiders. Scabies are transmitted by close contact with an infected person or animal. The mites burrow into the outer layers of the skin. The major symptom is intense itching.

Lice are parasites that generally infest the scalp and attach their eggs to hair. Lice are spread by direct contact, especially in crowded conditions or by sharing clothing or other personal articles like combs and brushes. Itching may be severe.

Scabies and lice do not typically transmit diseases, but skin infections can occur where the skin has been scratched open because of the intense itching.

**Scabicides** — used to treat scabies infestations.

**Examples of scabicide medications:**

- Nix cream (permethrin)
- Eurax (crotamiton)
- Kwell (lindane) — highly toxic

**Possible side effects:**

Skin irritation, rash, toxic to the central nervous system if used incorrectly or overused.

**Pediculocides** — used to treat lice infestations

**Examples of pediculocide medications:**

- Nix cream (permethrin)
- Kwell (lindane) — highly toxic and only used if other treatments have failed
- Rid (pyrethrins)

**Note:** Kwell should not be used before a bath, by persons with extensive dermatitis, by pregnant or lactating women or by children under the age of 2 years.

**Possible side effects:**

Skin irritation, rash, eye irritation if it gets into the eyes; toxic to the central nervous system if used incorrectly or overused.

**Special considerations for scabicides and pediculocides:**

- **Follow all directions exactly.**
- An individual licensed practitioner's order is required to administer a scabicide or a pediculocide.
- Do not apply to face, eyes or mouth.
- If after treatment you suspect that the individual still has or has been reinfected with scabies or lice, contact the individual's licensed practitioner for further directions.

## **Objective 4: Antifungal medications**

Used to treat fungal infections. Fungal infections may be superficial (on the skin) or systemic (in the body). Most infections are superficial and mild but may be difficult to treat. Fungal infections tend to develop in dark moist areas.

### **Common fungal infections:**

- Athlete's foot
- Ringworm
- Yeast infections
- Fingernail and toenail infections

### **Examples of topical antifungal medications:**

- Lotrimin (clotrimazole)
- Mycostatin (nystatin)
- Tinactin (tolnaftate)
- Desenex Max (terbinafine)
- Monistat (miconazole)

### **Possible side effects:**

Irritation and burning at application site, rash, itching.

### **Examples of oral antifungal medications:**

- Nizoral (ketoconazole)
- Lamisil (terbinafine)
- Diflucan (fluconazole)
- Sporanox (itraconazole)

### **Possible side effects:**

Nausea, vomiting, abdominal pain, itching, fever, headache, diarrhea, dry mouth and blurred vision.

### **Special considerations:**

- Treatment of a fungal infection may take a long time.
- Topical antifungal medications must be applied liberally to the affected area after the area has been cleaned and dried.
- Good hygiene will help prevent the spread of the infection.

## **Objective 5: Medications used to treat pain, injuries, symptoms of infection or allergies**

Identify the use and special considerations for medications used to treat the symptoms of illness and injuries: analgesics, antipyretics, expectorants, antitussives, decongestants and antihistamines.

**Analgesics, non-narcotic** — used to relieve minor complaints of pain or fever. The most common analgesics are over-the-counter (OTC) non-narcotic pain relievers.

**Examples of OTC analgesics:**

- Tylenol (acetaminophen)
- Motrin, Advil (ibuprofen)
- Aleve (naproxen sodium)

**Possible side effects:**

Stomach upset, rash, bruising, dizziness, ringing in the ears.

**Special considerations:**

- Any frequent complaints of pain or any pain that the individual describes as severe or interferes with the ability to participate in usual activities should be evaluated by a licensed practitioner.
- Ibuprofen should not be administered to individuals taking lithium.
- Acetaminophen overdose/poisoning can cause severe, permanent and life-threatening liver damage. Overdosing can occur by giving too much acetaminophen at one time or by frequently giving acetaminophen over a short period of time.
- Many OTC medications contain acetaminophen. Know the active ingredients of all medications the individual has ordered and clarify with the physician as needed.
- Acetaminophen is available in many different strengths. Ensure the prescribed dose exactly matches the Physician's Visit Orders.

**Narcotic analgesics** — controlled medications used for more serious injuries for a short time. Narcotic analgesics must be accounted for because they are controlled medications.

**Examples of narcotic analgesics:**

- Vicodin
- Tylenol with codeine
- Oxycontin

**Possible side effects:**

Sedation, slow and shallow breathing, nausea, vomiting, constipation, dizziness.

**Special considerations:**

- Narcotic analgesics are controlled medications with a potential for abuse.
- Licensed practitioner's orders for narcotic analgesics should be very specific about when and for how long the medications may be administered.

**Antipyretics** — used to reduce a fever.

**Examples of antipyretics:**

- Tylenol (acetaminophen)
- Motrin, Advil (ibuprofen)
- Aspirin

**Possible side effects:**

Stomach upset, rash, bruising, dizziness and drowsiness.

**Special considerations:**

- Fever is a sign of illness or a serious side effect to some medications.
- Record the temperature before the antipyretic is given and an hour after to see if the fever has gone down.

**Expectorants** — used to loosen secretions in the lungs and promote coughing to clear the airways.

**Examples of expectorants:**

- Robitussin
- Mucinex

**Possible side effects:**

Nausea, vomiting and headache (from the coughing).

**Special considerations:**

- Expectorants relieve coughing by loosening the secretions, allowing the upper body to expel them.
- Increasing fluid intake will help to loosen secretions, making the expectorant more effective.

**Antitussives** — used to suppress the cough reflex.

**Examples of antitussives:**

Over-the-counter:

- Vick's Formula 44
- Robitussin DM

Prescription (narcotic):

- Codeine (usually combined with other medications)

**Possible side effects:**

## Over-the-counter:

- Dizziness
- Nausea

## Prescription (narcotic):

- Dizziness
- Nausea
- Drowsiness or sedation
- Constipation

**Special considerations:**

- Antitussives should not be used on a routine basis to stop a cough because this could mask complications such as pneumonia or bronchitis.
- Antitussives are usually ordered for hour of sleep (HS) to quiet a cough that interrupts sleep.
- Narcotic antitussives must be accounted for and have a narcotic count sheet.
- Dextromethorphan (DM) interacts with many medications. Ensure the physician has a complete list of medications your individual is using.

**Decongestants** — used to reduce the congestion in the sinuses and the nasal passages.

**Examples of decongestants:**

## Over-the-counter:

- Triaminic<sup>®</sup>
- Sudafed PE (phenylephrine)

## Prescription:

- Sudafed (pseudoephedrine)

**Possible side effects:**

Excitability, nausea/vomiting, anxiety, insomnia and tremors.

**Special considerations:**

- Decongestants can cause the inability to sleep. Consider the time of day when administering a PRN decongestant.

**Antihistamines** — used to reduce allergy and cold symptoms such as runny nose, watery eyes and hives.

**Examples of antihistamines:**

- Claritin (loratadine)
- Benadryl (diphenhydramine)
- Zyrtec (cetirizine)
- Allegra (fexofenadine HCl)

**Possible side effects:**

Drowsiness, sedation, headache and dry mouth.

**Special considerations:**

- Many antihistamines cause drowsiness. Consider the activities planned prior to administering a PRN antihistamine.
- Some antihistamines cause a decreased ability to urinate. Monitor trips to the bathroom when your client takes an antihistamine.

**Objective 6: Medications used to treat cardiac (heart) disease and circulatory system disorders**

Identify the use and special considerations for cardiovascular medications.

**Examples of cardiac medications:**

(Labeled use: Heart conditions and blood pressure problems.)

- Atenolol, Metoprolol, Propranolol (beta blockers) — decrease the heart rate and cardiac output, which lower blood pressure.
- Enalapril, Lisinopril, Vasotec (ACE inhibitors) — expand blood vessels and decrease resistance, allowing blood to flow more easily and the heart to work less.
- Norvasc, Amlodipine (calcium channel blockers) — interrupt the movement of calcium into the cells, which relaxes blood vessels and decreases the heart's pumping strength. Used to treat high blood pressure and chest pains (angina).
- Lasix, HCTZ, Spironolactone (diuretics) — used to rid the body of excess fluids and sodium through urination. Help to relieve the heart's workload.
- Warfarin, coumadin (anticoagulants) — used to decrease the blood's clotting ability.

**Unlabeled use:** Sometimes cardiovascular medications are used to treat anxiety, agitation, PTSD, and ADD or ADHD.

- Clonidine
- Tenex

**Possible side effects:** For all cardiovascular medications, whether labeled or unlabeled:

Low blood pressure, dizziness, slow heart rate, nausea.

### **Special considerations:**

- Blood pressure and pulse must be monitored periodically even if the medication is for an unlabeled use. Some cardiac medications require the pulse to be taken just prior to administration. Follow the physician's instructions.
- Doses should not be missed. Missed doses may result in dangerous changes in blood pressure. Report any missed dose to the outreach nurse, the physician or the site manager and follow the Addendum to Physician Orders if one is available.

### **Objective 7: Anticonvulsants, medications used to control seizure disorders**

Identify the use and unlabeled use for anticonvulsant medications and the special considerations for anticonvulsant medications.

#### **Examples of anticonvulsants:**

##### ***Labeled use:***

- Dilantin (phenytoin)
- Luminal (phenobarbital)

***Unlabeled use:*** Used for mood stabilization (these medications may also be used to treat seizures).

- Tegretol (carbamazepine)
- Depakene (valproic acid)
- Lamictal (lamotrigine)
- Neurontin (gabapentin)
- Depakote (divalproex)
- Topomax (topiramate)
- Trileptal (oxcarbazepine)

#### **Possible side effects (for all labeled and unlabeled anticonvulsants):**

Drowsiness, diarrhea, headache, rash, nausea and vomiting.

#### **Special considerations:**

- Anticonvulsant medications should be given at consistent intervals to maintain a therapeutic level of medication in the bloodstream.
- These medications may build up to toxic levels in the body. Licensed practitioners will order periodic blood tests to check the therapeutic levels. It is important to keep these appointments.

- Sometimes the neurologist or primary care physician (PCP) will order one of these medications and the psychiatrist will also be using it as a treatment. It is important to know who originally ordered the medication. Only the licensed clinician who originally ordered the medication should be adjusting the levels.

### **Objective 8: Medications used to treat digestion problems**

Identify the uses for medications that treat digestive problems, including laxatives and antacids.

#### **Laxatives: Promotes bowel movements to treat or prevent constipation.**

##### **Examples of laxatives:**

- Colace (docusate sodium) — stool softener; softens the stool so it can more easily pass through the rectum.
- Metamucil (psyllium) — fiber laxative; adds bulk to the feces so that nerve endings can recognize stool needs to pass.
- MiraLax (polyethylene glycol) — osmotic laxative; retains water in the stool, which allows easier passage through the rectum and increases bowel movements.
- Milk of Magnesia (magnesium hydroxide) — osmotic laxative; see MiraLax for action.
- Dulcolax (bisacodyl) — stimulant laxative; works by increasing the activity of the intestines to move the stool through the digestive tract.

##### **Possible side effects:**

Nausea, abdominal cramps and diarrhea.

##### **Special considerations:**

- Exercise, fiber (fresh fruits, fresh vegetables and whole grains) and fluids can prevent or relieve constipation without medications.
- Some stool softeners such as Colace may be ordered as a scheduled medication.
- Fiber laxatives such as Metamucil should be administered immediately upon mixing with water or juice and followed with a glass of water.
- Report any complaints or symptoms of constipation and change in bowel habits.

**Antacids:** Used to treat heartburn by reducing the acidity in the stomach.

**Examples:**

- Mylanta
- Tums
- Maalox
- Zantac (ranitidine)
- Prilosec (omeprazole)

**Possible side effects:**

Constipation and diarrhea.

**Special considerations:**

- Antacids can affect the absorption of other medications such as antibiotics. Clarify with the pharmacist or physician if your client is taking a medication that could interact.
- Most antacids are not recommended for children under the age of 12. Clarify with the physician if your client has an order.
- Sometimes calcium-containing antacids are ordered for the calcium content. Know why your client is receiving each medication.

**Objective 9: Birth control/hormone medications (contraceptives)**

Identify the different types of hormone and birth control medications.

**Uses:** Contraceptives are used to prevent pregnancy, adjust hormone levels, stabilize mood and regulate mensus cycles.

**Examples:**

- **Oral:** Norinyl, Triphasil, Ovral, Loestrin, Ortho Novum
- **Patch (transdermal):** Ortho Evra
- **Injectable:** Depro-Provera

**Possible side effects:**

Nausea, weight gain, irregular menstrual cycles, headache, bloating, depression, blood clots and stroke.

**Special considerations:**

- These medications do not protect against sexually transmitted diseases (STDs).
- Oral contraceptives must be taken every day to be effective.
- Transdermal patches should be replaced on the same day of each week.

- Depro-Provera is an injectable medication and can only be given by a licensed practitioner. To remain effective it should be given as close to every 90 days as possible.

## **Lesson 7: Medications used to treat psychiatric conditions (psychotropics)**

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Identify the use for antipsychotic medications.
2. Identify the use for anticholinergic medications.
3. Identify the use for antidepressant medications.
4. Identify the use for mood stabilizer medications.
5. Identify the use of anti-anxiety medications.
6. Identify the use for stimulant and non-stimulant ADHD medications.
7. Identify the use of hypnotic medications.
8. Identify the serious side effects (adverse reactions) that must be reported immediately.
9. Identify other possible side effects and how to prevent or relieve them.

Psychotropic medications have changed the lives of people with mental disorders for the better. Many people with mental disorders live fulfilling lives with the help of these medications. Without them, people with mental disorders might suffer serious and disabling symptoms ([www.nimh.nih.gov/health/publications](http://www.nimh.nih.gov/health/publications)). Psychotropic medications affect the central nervous system (the brain and spinal cord). They influence how the brain thinks, affects emotions and behavior. Licensed practitioners will often need to make dose adjustments or change medications as they work with the individual and determine what the best medication plan will be. As noted earlier, all medications can cause harm. You must pay close attention to any changes in behavior, activity level, ability to participate in activity and overall well-being and report these changes.

### **Objective 1: Identify the use for antipsychotic medications.**

Antipsychotic or psychotropic medications help to reduce psychotic symptoms in individuals who have schizophrenia, post-traumatic stress disorder (PTSD) and borderline personality disorder (BPD). They may also be used for individuals with autism, intellectual disabilities and Tourette's syndrome to help control psychotic symptoms, verbal and movement tics. Antipsychotics may also be called neuroleptics.

### **Examples of antipsychotic medications:**

- Risperdal (risperidone)
- Seroquel (quetiapine)
- Abilify (aripiprazole)
- Clozaril (clozapine)
- Trilafon (perphenazine)
- Geodon (ziprasidone)
- Zyprexa (olanzapine)
- Thorazine (chlorpromazine)
- Haldol (haloperidol)

### **Possible side effects:**

Drowsiness, rapid heartbeat, dizziness when changing positions, weight gain, problems with menstrual cycle, sunburn, skin rash, difficulty swallowing, drooling, facial tics or twitches, changes in gait (how the individual walks), fever.

### **Special considerations for antipsychotic medications:**

- Antipsychotic medications can cause a serious and often irreversible movement disorder called tardive dyskinesia.
- Most antipsychotic medications require the use of an anticholinergic medication to alleviate side effects.
- If any side effects are suspected, hold the medications and contact the outreach nurse or the prescribing clinician for clarifications of actions to take.

Oregon Administrative Rules (OARs) do not allow the use of PRN psychotropic medications without a variance from DHS Licensing & Certification for adult services and DHS Licensing and Certification for children.

### **Objective 2: Identify the use for anticholinergic medications.**

Anticholinergic medications treat abnormal muscle movements that may be associated with antipsychotic medications.

### **Examples of anticholinergic medications:**

- Cogentin (benztropine)
- Benadryl (diphenhydramine)
- Artane (trihexyphenidyl)

### **Possible serious side effects:**

Flushing of the face, problems sleeping, headache, blurred vision, drowsiness, increased sensitivity to light, constipation, dry mouth, thirst, decreased sweating, confusion, tremors, rapid/irregular heartbeat, difficulty urinating.

**Special considerations:**

- If symptoms get worse or do not improve, contact the outreach nurse or the ordering physician.

**Objective 3: Identify the use for antidepressant medications.**

Antidepressant medications are used to treat depression, pain, obsessive compulsive disorder (OCD), insomnia and habitual behavior such as smoking cessation.

**Examples:****Labeled use:** Antidepressant

- Celexa (citalopram)
- Remeron (mirtazapine)
- All of the following

**Unlabeled use:** Pain

- Elavil (amitriptyline)
- Pamelor (nortriptyline)

**Unlabeled use:** OCD

- Anafranil (clomipramine)
- Luvox fluvoxamine)
- Prozac (fluoxetine)
- Paxil (paroxetine)
- Zoloft (sertraline)

**Unlabeled use:** Smoking cessation

- Wellbutrin, Zyban (bupropion)
- Aventyl (nortriptyline)

**Unlabeled use:** Insomnia

- Desyrel (trazodone)
- Elavil (amitriptyline)

**Possible side effects:**

Flu-like symptoms, loss of appetite, irregular heart beat, hot flashes, blurred vision, inability to concentrate, weight gain, headache, diarrhea, nausea, GERD, insomnia, dizziness, tremors, weakness, numbness, flattened emotions, irritability.

**Special considerations:**

- Antidepressants are psychotropic medications that elevate the mood and increase physical activity and mental alertness.

- Suicidal thoughts and behavior may increase as individuals have more energy to carry out a suicide plan.
- Carefully monitor and report any client that makes suicidal statements or actions.
- Report any complaints or observation of stiffness, restlessness or fever.
- Be aware of drug-to-drug interactions.

**Objective 4: Identify the use for mood stabilizer medications.**

Mood stabilizers are used to treat manic-depression (bipolar disorder) as well as to help improve impulse control and aggression.

**Examples:**

Labeled use:

- Lithium

Unlabeled use:

- Depakene (valproic acid)
- Topomax (topiramate)
- Tegretol (carbamazepine)
- Depakote (divalproex)
- Klonopin (clonazepam)

**Possible side effects:**

Lithium side effects:

Extreme thirst; fever; feeling restless or confused; eye pain and vision problems; urinating more or less than usual; restless muscle movements in eyes, tongue, jaw or neck; pain and cold feeling or discoloration in fingers or toes; feeling light-headed; fainting; slow heart rate; hallucinations; seizures; fever with muscle stiffness; nausea; vomiting; ringing in ears; thinning or drying of the hair; itchy skin.

(See Lesson 6, Objective 7, Anticonvulsants: Possible side effects.)

**Special considerations:**

- Ibuprofen should not be administered to a client taking lithium.
- Blood tests will be ordered frequently to check therapeutic levels.
- Ensure plenty of fluids are offered to prevent dehydration.

## **Objective 5: Identify the use for antianxiety medications.**

Antianxiety medications are used to treat anxiety, tension and nervousness.

### **Examples:**

- Ativan (lorazepam)
- Valium (diazepam)
- Xanax (alprazolam)
- Buspar (buspirone)

### **Possible side effects:**

Appearance of being drunk, drowsiness, lack of energy, clumsiness, slow reflexes, slurred speech, confusion and disorientation, depression, dizziness, lightheadedness, memory loss, nausea, stomach upset, blurred or double vision, mania, hostility and rage, aggressive or impulsive behavior, hallucinations.

### **Special considerations:**

- Some antianxiety medications are controlled substances and require two staff to verify the count. (See Lesson 9, Objective 2.)
- OAR does not allow PRN use of antianxiety medications.
- A one-time dose of antianxiety medications may be ordered and administered prior to medical or dental appointments as part of the appointment.
- An overdose of an antianxiety medication can be fatal.

## **Objective 6: Identify the use for stimulants and non-stimulant medications used to treat ADHD.**

These medications are used to increase attention span and decrease hyperactivity.

### **Examples:**

Stimulants used to treat ADHD:

- Ritalin, Methylin, Concerta (methylphenidate)
- Dexedrine, Focalin (dextroamphetamine)
- Adderall (dextroamphetamine and amphetamine)

Non-stimulant medication to treat ADHD:

- Straterra (atomoxetine)
- Wellbutrin and some antidepressant medications

**Possible side effects:**

Fast, pounding heart rate, feeling like you may pass out, fever, sore throat, headache, severe blistering, peeling and red skin rash, aggression, restlessness, hallucinations, unusual behavior, motor tics, easy bruising, increased blood pressure, buzzing in the ears, anxiety, confusion, chest pain, shortness of breath, seizure, stomach pain, nausea, vomiting, loss of appetite, sweating, weight loss, nervousness, insomnia.

**Special considerations:**

- Stimulant medications are controlled medications and require two staff to verify the count. (See Lesson 9, Objective 2.)
- Stimulants are usually administered in the morning. Clarify orders and time administration for twice-a-day (BID) doses.
- Stimulants may delay children's growth.
- Stimulants may suppress the appetite so weight and food intake may need to be monitored.

**Objective 7: Identify the use for hypnotic medications.**

Hypnotic medications are used to induce sleep or promote sleep.

**Examples of hypnotics:**

- Ambien (zolpidem)
- Desyrel (trazodone)
- Remeron (mirtazapine)
- Sonata (zaleplon)
- Benadryl (diphenhydramine)

**Possible side effects:**

Headache, nervousness, talkativeness, apprehension, irritability, confusion, euphoria, relaxed feeling, weakness, tremor, lack of concentration, disorders of coordination, depression, dreaming/nightmares, insomnia, palpitations, chest pains, rapid heart rate, heartburn, nausea, vomiting, diarrhea, constipation, abdominal pain, loss of appetite, alterations in taste, dry mouth or excessive salivation.

**Special considerations:**

- Encourage non-medication interventions first to help with sleeplessness such as warm baths, herbal tea, quiet low-light atmosphere.
- Individuals can become dependent on hypnotics.
- Dangerous interactions may occur if the individual is also taking antihistamines or antianxiety medications.

### **Objective 8: Identify serious side effects (adverse reactions) that must be reported.**

Psychotropic medications can have serious life-threatening side effects that may become permanent. If you notice any of these side effects, hold the medication and contact the outreach nurse or the prescribing physician:

- Fever or complaint of sore throat;
- Changes in gait (how the client walks or moves);
- Muscle stiffness, especially in the mouth area or neck;
- Drooling or difficulty swallowing;
- Confusion or increased sedation;
- Eyes rolling back in the head;
- Severe complaints of stomach pain;
- Muscle tics or uncontrolled movements.

### **Objective 9: Identify other possible side effects and how to prevent or relieve them.**

The possible side effects listed under each category may not be all side effects or adverse reactions. Most medications can have interactions with other medications that can cause side effects. Some medications can have interactions with food. You are expected to read about every medication you administer at least once prior to administering it. You can find information on each of the medications (e.g., specific drug manufacturer) in the Pill Book, side-effect sheets from the pharmacy, Therap drug look-up and on the Internet.

<b>Side effects</b>	<b>What you can do</b>
Sensitivity to the sun	Apply sunscreen before going outdoors (no physician order is required since this topical treatment is used to prevent sunburn).
Sensitivity to heat	Encourage client to drink plenty of water or other fluids to avoid overheating or dehydration.
Constipation	Encourage fluids and exercise as well as a diet rich in fibers such as fruits, vegetables and whole grains.
Appetite changes	Monitor food intake and encourage healthy food choices. Follow diet orders.
Weight gain	Follow diet orders, monitor food intake

	and encourage healthy food choices.
Sleep disturbances	Allow for relaxing bedtime routines such as a bath, cup of warm herbal tea and quiet dim environment.
Dry mouth	Encourage fluids, gum, sugar-free mints or candies, popsicles, and foods rich in liquid content such as watermelon, pudding, applesauce, etc.

### Special considerations:

- If you see something different, report it. (See Lesson 4, Observing and reporting.)
- Know where to find your **Pill Book** or **side effects** sheets in the home.
- You must have access to the information and know the side effects of all prescribed medications being used in your home.
- Remember that no one can expect to know everything about any given medication (*even doctors and nurses look things up daily to be sure*). You should always look up the details if you do not know or you are not sure.
- Know why each medication is being used.
- Become familiar with the most important unwanted effects of those medications.

## Lesson 8: Administration techniques

**Desirec outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Define standard precautions.
2. List the different forms of oral medication and how to administer them.
3. Measure and administer doses of liquid medications.
4. Administer eye medications.
5. Administer ear medications.
6. Administer nasal medications.
7. Administer topical treatments.
8. Administer transdermal medication patches.
9. Administer rectal or vaginal medications.

Administering medications is one of the most important aspects of your job. It is important to understand the potential dangers associated with giving medications to others. You must ensure that all medications/treatments are given exactly as ordered by the prescribing clinician or as stated on the manufacturer's instructions.

## State operated community medication administration procedure

- Allow ample time to pull medications without distractions.
- Wash hands before and after medication administration.
- Assemble appropriate equipment (keys, medication cups, medication bubble packs, etc.).
- Perform the first two of the three checks:
  - **Check 1:** Remove the medication from the secure locked area and check the prescription label against the MAR/TAR to make sure they match.
  - **Check 2:** As you remove the medication from the bubble pack/pour the liquid, etc., again check the prescription label against the MAR/TAR. Document in the box on the MAR/TAR.  
Note: **MAR/TAR (DHS 4573)** – in Therap, click in the box for your initials to appear.
  - Return medication to the locked area.
- Identify the client.
- Administer the medications to the client.
- Perform the last of the three checks:
  - **Check 3:** After administering, you again remove medications from the secured locked area and compare the prescription label to the MAR/TAR, ensure the medication has been popped out and initial the bubble pack.

### Objective 1: Define and implement standard precautions.

Standard precautions are the steps you take to protect yourself and the clients you care for from exposure to possible infections. **Personal protective equipment** such as gloves, gowns, masks and goggles are the tools we use to prevent the spread of possible infections. **Standard precautions** are also known as **universal precautions**.

### Hand washing is the best way to prevent the spread of infection.

#### Gloves:

Medical gloves are disposable gloves used during medical procedures. Medical gloves help prevent contamination between caregivers and clients. Use medical gloves when your hands or nails may touch someone else's bodily fluids (such as blood, respiratory secretions, vomit, urine, saliva or feces). You should also wear gloves when handling some medications such as pain patches or chemotherapy medications.

**Special considerations:**

- Wash your hands and dry thoroughly before putting on gloves.
- Make sure your gloves fit properly for you to wear them comfortably during client care.
- Some people are allergic to the natural rubber latex used in some medical gloves. If your hands are red or rashy or you have a burning sensation on your hands after using medical gloves, try using latex-free medical gloves.
- Medical gloves can be thrown away in the regular trash unless they are contaminated with blood.
- After removal of the medical gloves, wash your hands thoroughly or use an alcohol-based hand sanitizer.

**Gowns:**

Surgical gowns are garments worn during medical procedures. Gowns help prevent contamination between caregivers and clients and they protect the caregivers' clothing.

**Special considerations:**

- You should consider wearing a surgical gown to cover your trunk, arms, legs and clothing when you may be splattered by someone else's bodily fluids.
- Soiled gowns can be placed in the regular trash unless they contain excessive amounts of blood.
- When taking off the gown, use your gloved hands to untie the neck and back straps. Shrug the gown off the shoulders and grab the inside of the gown to pull off one arm. Roll the gown toward the other arm, keeping the exposed outside of the gown on the inside of the rolled area. Now pull the gown off of the remaining arm and continue to roll the gown inside out. Remove gloves, throw all in the trash and wash your hands with soap and water or an alcohol-based sanitizer.

**Masks:**

Masks are designed to cover the nose, lower face, jaw and any exposed facial hair. They are worn in an attempt to contain moisture droplets expelled by the health care worker from talking, coughing or sneezing. They also protect accidental splashes of client bodily fluids from entering your nose or mouth.

**Special considerations:**

- Always remove the mask by the strings because the center of the mask contains the most contamination.

## **Objective 2: List the forms of oral medications.**

Most of the medications given are in the oral (P.O.) form. Some forms of oral medication include:

- Liquid medications;
- Tablets;
- Capsules;
- Gel caps;
- Chewable tablets;
- Quick dissolving tablets — medications, such as Zyprexa, that are designed to dissolve on the tongue or in the mouth prior to swallowing;
- Enteric-coated tablets — tablets or caplets with a thin paper-like coating that helps the medication be released slowly or further down the digestive tract;
- Sustained or slow-release tablets or caplets — designed to dissolve or be absorbed over a long period of time so that the individual does not have to take lower doses more times per day;
- Scored tablets — have a groove across the center of the tablet that enables the tablet to be cut in half.

### **Special considerations:**

- Have the client remove any gum, candy or food from his or her mouth prior to administering medications.
- Always give oral medications with fluid to help the client swallow the medications. Water is usually the best choice because it will not interact with medications.
- Some medications can have interactions with dairy products or grapefruit juice. If your client prefers to take medications with milk or grapefruit juice, ensure the prescribing clinician is aware of this.
- Unless identified as chewable, tablets should not be chewed since this will cause improper absorption.
- If needed, most oral medications can be given with a food such as applesauce, pudding or Cool Whip. Always follow medication administration with fluid to prevent choking.

### **Crushing medications:**

If your client has difficulty swallowing tablets or capsules, you may need to crush these medications. Ensure the prescribing clinician is aware of this and get an order to crush medications.

- Medications that should not be crushed include:
  - Enteric-coated medications
  - Sustained-release medications (SR, XL, XR, CR)
  - Gel caps
  - Other liquid-filled capsules
- To crush a medication with a pill crusher:
  1. Place the medication in a paper medication cup.
  2. Place a second medication cup over the tablets and inside the first medication cup.
  3. Close the handle on the pill crusher until the medication is sufficiently crushed.
- To crush a medication using a mortar and pestle:
  1. Ensure the mortar and pestle are clean and dry.
  2. Place the medication in a paper medication cup and fold so the medications will not spill out.
  3. Begin smashing the medication with the pestle until it is sufficiently crushed.

Mix crushed medications with a small amount of applesauce or pudding. Ensure that all of the food/medications are eaten to ensure they get the full dose of medications. Follow with a glass of water after administration.

### **Scored medications:**

Staff will not split medications even if it is scored (a line or groove dividing the pill in half). If the client receives an order for a half-tablet, staff will have the pharmacy split the scored tablets.

### **Objective 3: Know how to measure and administer doses of liquid medications.**

Several measuring devices are available for accurately measuring liquid medications such as:



- Calibrated medication measuring cup — small plastic cups that may be used to measure up to 30 cc/ 30 ml or 2 tablespoons. Use a felt marker to mark the dose line on the medicine cup. Place the cup on a level surface. Pour to the lowest point of the curve. Pour slowly to ensure you do not over-pour. **Never** pour liquid medications back into the bottle.



- Oral syringe — a specially designed syringe used to measure small doses, usually less than 5 cc/ 5 ml or 1 teaspoon.

To use, place the tip of the syringe into the liquid and draw up into the barrel of the syringe to the ordered dose.

- Calibrated medicine spoon — a spoon-shaped device with a hollow handle. These spoons will usually hold up to 1 teaspoon. To use, hold the spoon upright and pour the correct amount of liquid into the spoon.



- Oral dropper — medications packaged with their own dropper that is part of the bottle lid. These droppers are made to be used only with their original medication.

### Special considerations

- Never pour or pull any medications before you are ready to administer or package for an outing.
- While pouring medications from the bottle, hold the label facing the palm of your hand to avoid drips on the label.

### Objective 4: Know how to administer eye medications.

Prior to administering an eye medication, it is important to wash your hands and wear gloves. If the eye has some discharge on or in it, you should clean the eye before applying the medication.

To clean an infected eye:

- Moisten a piece of gauze or cotton ball with warm water.
- Gently wipe the infected eye from the inner to outer corner.
- To prevent spreading the infection, never use the same area of the gauze for more than one wipe.
- Use a second clean gauze or cotton ball for each eye.
- Remove gloves and wash your hands before administering the medication.

### Monitoring the eye during an infection:

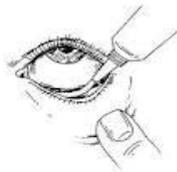
- Ask the client (if he or she is able to tell you) or note:
  - Does the eye feel or look worse?
  - Is the eye swollen, red, crusted or oozing more than prior to the doctor visit?
  - Does the eye hurt worse than prior to the doctor visit?

If you or the client answers yes to any of the above questions, contact the physician and follow any further instructions.

### Administering eye medications:

- Eye ointments — usually dispensed in a small tube with a pointed tip to allow a thin ribbon of medication to be placed inside the lower eyelid. These tend to blur the vision so, if the medication is ordered for both eyes, allow time for the vision to clear before administering in the second eye.

### To administer:



- Give the client a tissue or have one available to wipe off the excess.
- Squeeze a small amount of medication out of the tube onto a tissue before administering.
- Gently pull down the lower lid to form a pocket.
- Rest the heel of your hand on the client's forehead to stabilize your movements.
- Starting at the inner corner of the eye, apply a thin ribbon of ointment just inside the lower lid, being careful not to touch the eye.
- Rotating the tube after administering the ointment will help detach the medication from the tube.
- Before replacing the cap on the tube, squeeze a tiny amount of ointment from the tube and discard it. This will prevent contamination of the medication.

### Eye drops:

- Give the client a tissue or a clean warm moist washcloth or have one available to wipe off the excess.
- Gently shake the eye drop medication container.
- Remove the cap and place it on its side on a clean tissue.
- Have the individual look up if possible.
- Gently pull down the lower lid to form a pocket.



- Rest your hand on the forehead to stabilize your movements.
- Taking special care to not touch the applicator to the eyeball, instill the ordered number of drops into the lower lid at the inner corner.

**Special considerations:**

- Eye medications must be sterile.
- Eye medications must have the word “ophthalmic” or “eye” on the label.
- Medications should be stored at room temperature.
- Never bandage an eye unless there is a specific order to do so.

**Objective 5: Administering ear medications**

Ear medication is usually dispensed in a small bottle with a dropper attached. It is best to have the client sit with the head tilted to the side or have the client lie down on his or her side with the ear that requires medication facing up.

**To administer:**

1. Gently remove any secretions in the external ear canal with a damp gauze pad.
2. Gently pull the ear up and back to align the ear canal.
3. Place the prescribed number of drops against the sides of the ear near the ear canal opening to allow the medication to roll in.
4. Do not allow the dropper’s tip to touch the ear; this will contaminate the contents.
5. Have the client wait five minutes, if possible, before changing positions.
6. You may place a cotton ball in the ear if appropriate for the client.
7. Wipe off the medication applicator with an alcohol wipe prior to replacing the lid.

**Special considerations:**

- Be sure the ear canal is clean and dry. Document and report if you notice any drainage or if the client reports pain.
- Never insert a cotton swab into the ear canal. You can damage the ear canal or the eardrum.
- The client may feel dizzy, nauseated or have ear pain after ear drops are administered. Warming the ear drops to room temperature before administration may help.

## Objective 6: Administering nasal medications

Nasal medication can be dispensed by:

### Nasal sprays:

These medications are in a squeeze bottle with a spray tip designed to insert the tip into the nostril no deeper than 1 cm or 3/8 inch.



### Nasal pumps:

These medications are in a similar container as the nasal sprays; however, they have a handle just under the insertion tip that, when pressed down toward the bottle, administers the correct dose.



### Nasal drops:

These medications are designed to administer drops, rather than a “puff.”



### How to administer spray and pump nasal medications:

1. If possible, have the individual blow his or her nose to clear the discharge.
2. While wearing gloves gently plug one nostril.
3. Place the tip of the applicator into the other nostril no more than 1 cm or 3/8 inch.
4. Ask the client to breathe in through the nose as the spray is administered.
5. Have the individual breathe out through the mouth.
6. Repeat with the other nostril.
7. Wipe application tip off with an alcohol wipe before replacing the lid.

### How to administer drop nasal medications:

1. If possible, have the individual blow his or her nose to clear the discharge.
2. While wearing gloves, draw enough medication into the dropper for both nostrils.
3. Have the individual tip back the head.
4. At the entrance of the nostril, slowly instill the prescribed number of drops into the nose. Do not touch the nose with the droplet applicator.

5. Repeat in the other nostril.
6. Encourage the individual to keep the head back and not blow for five minutes.

### **Special considerations:**

- Some nasal preparations can cause nasal irritation and ulcerations. If the individual is experiencing pain or abnormal nasal drainage, hold the medication and contact the ordering clinician.
- Tolerance may develop to some nasal preparations and overuse of some preparations may cause rebound congestion.

### **Objective 7: Administering inhaled medications**

There are several types of inhaler devices that may be used for treatment of asthma or other lung conditions. (See Lesson 5, Asthma medications.)

#### Metered-dose inhalers (MDI)

MDIs use chemical propellants to push out the medication from the inhaler. A spacer or aero chamber may be prescribed to use with the MDI to make proper use easier and the medication more effective. (See Lesson 5, Objective 6, Steps for using your inhaler.)

#### Aero-chambers or spacers

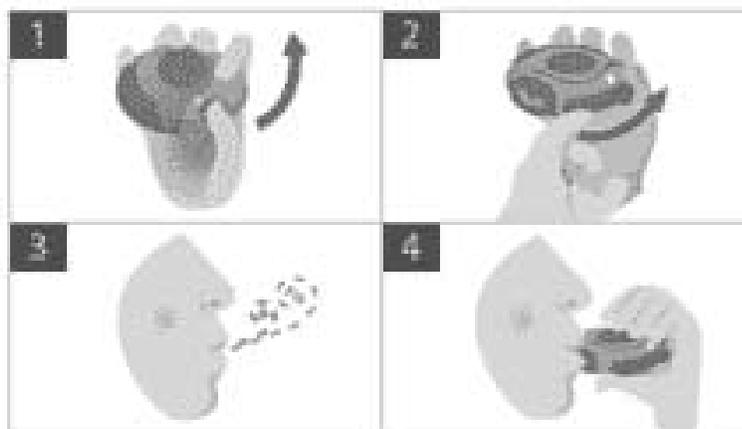
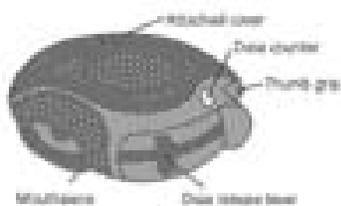


The open chamber captures and holds the mist from a dose of an inhaler until the client starts to breathe from the mouthpiece of the spacer or aero-chamber.

1. Place the inhaler into the spacer (aero-chamber) and have the client place the spacer into his or her mouth, forming a tight seal.
2. Press the top of the MDI, releasing the medication into the spacer.
3. Tell the individual to slowly breathe in and out the prescribed number of times, taking deep breaths and holding the breath for several seconds.
4. Wait one minute and repeat the process.

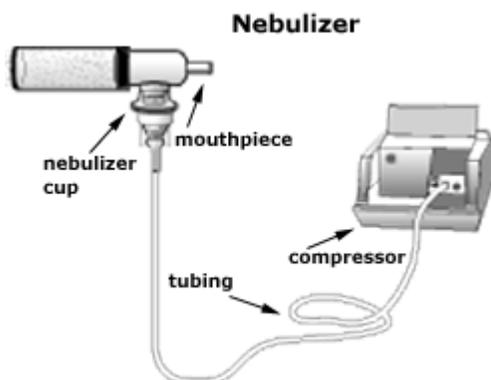
#### Dry powder or rotary inhalers (diskus)

Dry powder inhalers are activated through breathing. They release the medications through rapid inhalation instead of propellants.



## Nebulizers

Nebulizers convert liquid medication into a fine mist and deliver the mist through a face mask or mouthpiece connected to the nebulizer machine with plastic tubing.



([www.ymghealthinfo.org](http://www.ymghealthinfo.org))

## Special considerations:

- Two puffs are usually ordered for a metered-dose inhaler (MDI). Unless otherwise instructed, the individual must wait at least one minute between puffs to allow the medication to be absorbed from the first puff.
- When more than one inhaler is prescribed, ask the prescribing clinician which inhaler to administer first. Usually bronchodilators are given first and then inhaled steroids are given second.
- The use of a relief inhaler should be effective within a few minutes after administration. If relief is not obtained, refer to the individual's protocol.
- After steroidal inhaler use, the client should rinse his or her mouth with water (swish and spit) to decrease the possibility of fungal infections in the mouth.

## **Objective 8: Administering topical treatments**

Topical treatments are applied directly to the skin. Never let the container touch the skin. Topical medications and treatments come in powders, lotions, ointments and creams. You must have a licensed clinician's order to use a topical medication to treat a specific disorder. You do not need a licensed clinician's order if you are using the topical medication to prevent a disorder (such as sunscreen to prevent a sunburn).

### **To apply a powder:**

1. Ensure the skin is clean and dry.
2. Shake the canister to distribute the medication onto the desired area.

### **Special considerations:**

- Do not shake the powder near the client's face.
- For clients with a tracheostomy, apply the powder to a gauze pad and then wipe the powder on the desired area.

### **To apply a lotion, ointment or cream:**

1. Wash and dry hands, then put on medical gloves.
2. Shake liquid medications.
3. Place a small amount of medication on a gauze pad or applicator stick.
4. Gently rub the affected area in a circular motion.
5. If needed, bandage or cover the area.

### **Special considerations:**

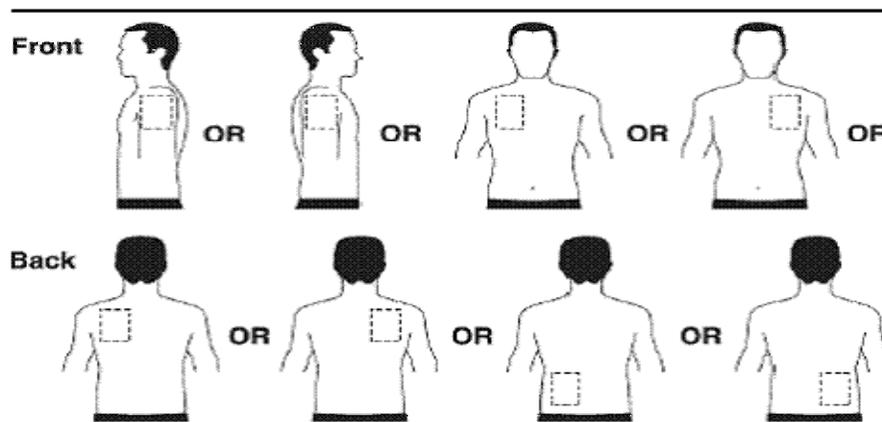
- Always tell the client what you are doing and allow for privacy.
- Apply enough medication to cover the area.
- Only use a gauze pad and never an applicator stick near a tracheostomy.
- Most topicals should be rubbed into the skin until they are no longer visible.
- Avoid contaminating the container by never applying a lotion, cream or ointment directly to the skin.
- Observe the client for any new rashes or rashes that are getting worse.

## **Objective 9: Administering transdermal medication patches**

- Transdermal medication is an adhesive patch designed to deliver a constant amount of medication through the skin. Several varieties of medications are available in patch form.
- Gloves should always be worn to apply or remove transdermal patches

- The adhesive patch should be applied to clean, intact, dry skin that is not infected, scarred, callused or tattooed.
- Wash the skin with soap and water both where the new patch will be placed and where the old patch was removed.
- Remove the old patch before applying the new one. Check the skin under the patch for redness or rash.
- Change application sites to avoid skin irritation.
- Peel backing off the patch, press onto the skin and apply pressure to ensure that it sticks to the skin.
- Document in the Progress Notes (or T-Log) as well as the back of the MAR (or in detail mode in the Therap MAR) where the patch was applied.

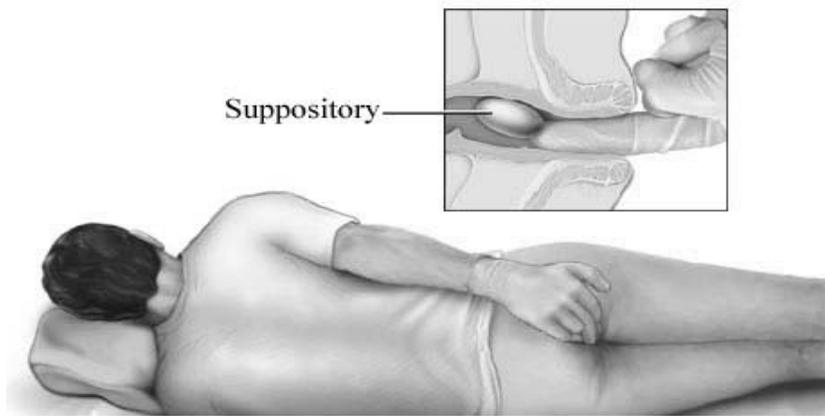
### Patch application sites



### Objective 10: Administering rectal and vaginal medications

1. Wash hands with warm soap and water. Dry thoroughly.
2. Obtain suppository. If it has not been refrigerated and is soft, run it under cold water for two minutes to harden it before removing the wrapper.
3. Put on clean medical gloves.
4. Take the suppository out of the wrapper.
5. Lubricate the suppository with water-based lubricant, such as K-Y Jelly. Do not use petroleum jelly or mineral oil.
6. Have the individual lie on his or her left side with the lower leg straight and the upper leg (right leg) bent at the knee and pulled up toward the stomach.





7. Gently lift the upper buttock to expose the rectal area.
8. Use your finger to insert the suppository, pointed end in first, toward the navel. Insert approximately one inch into the rectum or until you feel it no longer resist.
9. Hold buttocks together for a few seconds.
10. Encourage the individual to remain in the position for 15-20 minutes, if possible, or until the person feels a strong urge to have a bowel movement.

Discard all used materials and wash your hands thoroughly.

#### **Administering an enema:**



1. Warm the prescribed enema bottle to room temperature.
2. If possible, place a waterproof pad on the bed under the client.
3. Wash hands with warm soap and water. Dry thoroughly and put on clean medical gloves.
4. Remove the protective seal from the enema bottle.
5. Lubricate the administration nozzle with a water-based lubricant such as K-Y Jelly. Do not use petroleum jelly or mineral oil.
6. Squeeze any excess air out of the enema bottle.
7. Have the individual lie on his or her left side with the lower leg straight and the upper leg (the right leg) bent at the knee and pulled up toward the stomach.
8. Gently lift the upper buttocks to expose the rectal area.
9. Slowly insert the lubricated nozzle into the rectum toward the navel approximately four inches or 10 centimeters.

10. Slowly expell the liquid from the bottle into the rectum by rolling the container from the bottle. Keep steady pressure on the container to avoid back flow.
11. When all the liquid has been administered into the rectum, keeping the container rolled, slowly remove the nozzle from the anus.
12. Encourage the individual to remain in the position as long as possible or as recommended by the physician.
13. Discard all used materials and thoroughly wash your hands.

**Special considerations:**

- Always wash hands before and after administration and wear gloves.
- Always explain what you are going to do.
- Maintain client privacy.
- If possible, staff of the same sex should administer suppositories or enemas.
- Administer **vaginal suppositories** in the same way except insert into the vaginal opening as far as you can reach with your finger.
- For **vaginal applicators**, insert the applicator into the vagina and push the applicator plunger, as if inserting a tampon, until it stops.
- Remove the applicator and encourage the client to continue to remain in the position for 10-15 minutes so the medication can be absorbed.

## **Lesson 9: Safe medication storage**

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Describe the storage requirements for all medications.
2. Describe the procedure for the controlled medication count and when it must be performed.
3. Describe what to do if the controlled medication count is incorrect.
4. Describe how emergency medications — Epi-Pens and rescue asthma inhalers — should be stored.
5. Describe the procedure for medication disposal.

Oregon Administrative Rule (OAR) 411-325-0120 (4) and SOCP Policy # 4.012 (Medication Handling) require implementation of specific storage practices to ensure the safety of the individuals we serve. Each home has a unique area designated for medication administration. Only one staff at a time should be in this area when it is time to administer medications.



- Controlled medications are accounted for in four situations:
  - Upon receipt;
  - When dispensing;
  - When disposing; and
  - Between shifts.
- **Individual Narcotic Count Sheet (DHS 4570)** will be used for each controlled medication. Any discrepancies will be documented on the next available line and on a **Medication Incident Report (MIR) DHS 4630 (see Appendix B)**, or the **General Event Record (GER) — Medication Error** will be completed.
  - Staff must ensure that a count sheet is in place.
- Two staff from the same shift must count and verify the presence of a controlled medication. These staff can be a site manager/program manager/RN/RT/LPN or any staff current in medication administration (refer to this manual’s introduction).
- Controlled medication prepared for administration away from the home will be documented on the **Individual Narcotic Count Sheet**, the back of the paper MAR or in the detail mode on the Therap MAR. This packaged medication will be kept secured until administration.
- Controlled medications will be considered secure if in the possession of the responsible staff at all times or in a locked container.
- After the last medication pass on your shift, two staff will complete **Medication Administration Accountability Sign-Off Sheet (DHS 4663) (see Appendix C)** by ensuring an accurate control count.

**Objective 3: Describe the procedure for a discrepancy in the narcotic count.**

At times you may discover that the actual amount of controlled medications does not match the amount that the **Individual Narcotic Count Sheet (DHS 4570)** shows are present. This is called a “discrepancy” in the count. This is a serious situation that needs to be addressed immediately.

1. Two staff who are current in medication administration will carefully count again.
2. Check the Individual Narcotic Count Sheet documentation and the MAR to be sure every administered dose has been noted and the math is correct.
3. Look in the drug disposal container to ensure any controlled medications waiting for disposal pick-up are accounted for on the Individual Narcotic Count Sheet.
4. If a discrepancy remains after these actions:

- a. Write a **Medication Incident Report (DHS 4630 )** or **Therap GER – Medication Error**.
- b. Contact your site manager and report the discrepancy.
- c. Copy the **Medication Incident Report (DHS 4630)** and fax to the nurse manager. (The submitted GER will automatically be available for review by the nurse manager through Therap Services system.)
- d. Call the pharmacy and order a replacement for the missing medication.

**Objective 4: Describe how emergency medications — Epi-Pens and rescue asthma inhalers — should be stored.**

All emergency medications administered at home should be stored with all other medications, in a secure locked cupboard or cabinet. However, these medications should also accompany clients when they are away from home.

1. These emergency medications need to be stored in a stable room temperature environment.
2. These medications will be considered “secure” if they are always either in a locked container (bag, tackle box, etc.) or in your possession.
3. Do not leave the secured container in the vehicle.
4. If the weather is hot outside (85 degrees or higher), wrap a towel around an ice pack; place the Epi-Pen next to the towel and place the packet inside the secured container. Do not freeze, refrigerate or expose to extreme heat or sunlight; these conditions will cause the medication to oxidize and go bad (it turns dark yellow or brown in color).
5. Inhalers do not need any special treatment or an ice pack.

**Objective 5: Describe the procedure for controlled medication disposal and pharmacies other than PayLess Pharmacy.**

**Disposing of medication**

Before disposing of discontinued, contaminated or expired medications, keep them in a locked cupboard or locked box at a specified, secured location.

**Two medication disposal options exist:**

**Preferred method:** Contact the pharmacy and check for acceptance – requires two signatures from staff and/or manager.

**Alternate method:** Contact SOCP outreach nurse – requires multiple signatures. Both disposal options require the original **Drug Disposal Sheet (DHS 4590)** to be kept in the home for two years.

- If a controlled medication needs to be disposed of immediately, the Individual Narcotic Count Sheet (DHS 4570) must continue to reflect this until the disposal is completed and documented.
- The Drug Disposal Sheet (DHS 4590) will be used to document the disposal of the medication.

**Do not dispose of medications in the “sharps” container.**

- a. If disposing of an oral medication in the home,
  - See if the pharmacy will take return medications, or
  - Call Outreach nurse for pickup.
- b. If disposing of a topical/aerosol in the home, put in paper sack or other bag you cannot see through and dispose of in the outside garbage can (not in any receptacle inside the home).
- c. If the pharmacy will accept a return, attach the pharmacy receipt for the medications to the Drug Disposal Sheet (DHS 4590).

**Alternate method: Preparing medications for return/disposal through Central Office/outreach nurse(s)**

**At the house:** Requires two signatures — **first signature is the** site manager, BVS1, BVS2, HSS *or* program manager; the **second signature** is the outreach nurse.

- Medications remain in the bubble wrap (pack).
- Original DHS 4590 form is kept in the home for two years.
- Duplicate the DHS 4590 form and send the copy with the outreach nurse.

**Upon arrival at Central Office and/or Outreach Nursing Office:**

Outreach nurse is required to recount the medications upon arrival at Central Office or at the Outreach Nursing Office. Two signatures are required: **first signature** is the nurse manager and **second signature** is a witness or outreach nurse.

**Drug Disposal Sheet**

Date MM/DD/YY	Client's name	Drug description: Why taken:	Dose	Amount	Reason for disposal				Method of disposal: Return to Pharmacy or Central Office Disposal	Disposal signatures		
					Recalled	Outdated	Unused	Other		House required signatures: 1 <sup>st</sup> = SM, BV/S1, BV/S2 or PM 2 <sup>nd</sup> = Outreach Nurse	Central Office required signatures: 1 <sup>st</sup> = Nurse Mngr 2 <sup>nd</sup> = Witness	
					<input type="checkbox"/> Pharmacy* <input type="checkbox"/> Office							
					<input type="checkbox"/> Pharmacy* <input type="checkbox"/> Office							
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\* NOTE: Pharmacy disposal requires signature of a staff or manager at the house. SEE BACK for process details.  
Original Drug Disposal sheet remains at the house for 2 years and a copy goes with the outreach nurse.  
OSHA Requirements / OAR 411-325-120 Medication Administration, Medications Storage and Disposal of Medications  
DHS 4590 (03/10)

**Drug Disposal Sheet (DHS 4590)**

**Objective 6: PayLess Pharmacy medication disposal**

State Operated Community Program group homes that use PayLess Drug Long Term Care Pharmacy will follow policy # 4.011 Pharmacy procedure # 4.010.01 as follows:

1. Staff will fill out the **Payless Medication Returns to PayLess Pharmacy** form (see Appendix D). All information must be filled in. Under section “**Notes to PayLess,**” please write “**For destruction only.**”
2. Place the medications and completed form into a brown paper bag. Seal the bag closed and place the authorization for medication destruction label on the outside of the bag.
3. Keep the yellow copy of the form and file it in your home’s designated area.
4. PayLess personnel will pick up the medication for destruction on their next routine delivery to the group home.

**\* Note: PayLess will charge \$25 for a pickup outside the company’s normal routine deliveries. Please do not call for a pick up; when PayLess delivers items, return medications at that time.**

5. After PayLess destroys the medications, the pharmacy will return the white copy of the Return form. File this form with the yellow copy.

## Lesson 10: Medication errors

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Identify medication errors.
  2. Describe what to do if a medication error occurs and who to notify.
  3. Describe how to prevent medication errors.
- Safety is the number-one responsibility for staff giving medications. Any medication error could harm the individuals you serve.
  - Between 1.3 million and 1.5 million Americans are injured **every year**.
  - Approximately 7,000 people die **every year** from medication errors.
  - More than \$3 billion annually goes toward treating the consequences of medication errors.
  - The majority of medication errors occur from not following the medication administration procedure steps. When these are not done correctly, you are placing the individuals you serve at risk and staff members are not doing their jobs.

### Objective 1: Identify medication errors

Medication errors can happen for many reasons. “A medication error is a breakdown or failure at any point in the medication use process . . . choosing the drug prescribed, ordering the drug, dispensing it, administering it, monitoring the drug once it is taken, or even a problem if the patient does not take the drug as directed” (John Hopkins University School of Public Health 2001).

Most medication errors within our agency occur in these situations:

1. The wrong medication is administered to an individual.
2. The incorrect dose of medication is administered to an individual.
3. The medication is administered more than one hour before or after the scheduled time and outside the times allowed by the Addendum to Physician Orders (DHS 4621).
4. The medication is missed; this includes the individual refusing to take the medications.
5. The medication is administered using a route other than the one prescribed.
6. The individual has an adverse reaction to a medication that results in a change in condition or status.

These situations require the completion of a **Medication Incident Report (DHS 4630)** or a Therap **GER – Medication Error (or Injury for Adverse**

**Reactions).** The physician will be notified, the Progress Notes or T-Log will be documented, and a notation will be made on the MAR/TAR.

7. The **Individual Narcotic Count Sheet (DHS 4570)** (Policy 4.012) has a discrepancy in the number of pills.
8. Any medication is missing.

These situations require the completion of a **Medication Incident Report (DHS 4630)** or a **GER**.

**Objective 2: Describe what to do if a medication error occurs and who to notify.**

It is extremely important and wise to follow the seven medication rights and follow policy and procedure to the letter to minimize the chance of harm. It is important to promptly recognize and report an error rather than trying to hide it. You must handle medication errors as directed by Policy 4.004.

1. **Notify the individual's prescribing physician if any of the above 1-6 errors occurs, and follow all instructions given.**
  2. Then complete either: **the Medication Incident Report (DHS 4630) or General Event Report (see Therap Services SOCP Reference Guide).**
  3. If required, notify the site manager, nurse, case manager and parent/guardian.
  4. Mark in the Progress Notes (or T-Log) that a medication error occurred and note what other staff need to watch for.
  5. Make a note in the Daily Log/Shift Report (or T-Log) for all staff to be notified.
- The site manager, nurse manager and program manager carefully review all medication errors. The purpose of the review is to find and correct the root causes, rather than to find someone to blame. Correcting the causes of medication errors will help prevent future errors. It is important to carefully and thoughtfully review errors to avoid repeating them.

**Objective 3: Describe how to prevent medication errors.**

The best preventive measures for eliminating medication errors are to:

- Ensure all seven medication administration rights are followed.
- Do the triple check (Lesson 1, Objective 3).

- Minimize interruptions while you are administering medications.
- Know what medications you are giving (research unfamiliar medications).
  - If the medication doesn't look familiar, check it out.
  - If the individual says it's not his or her medication, check it out.

What ifs ...

- The wrong medication is accidentally punched out of the bubble pack?
  - Dispose of the medication and document it on the drug disposal record.
  - Contact the pharmacy for replacement.
  - Make a note in the Daily Log/Shift Report (or T-Log) so other staff know medication is ordered.
- Break the seal on a pill not being used right now.
  - **Do not** tape it back together.
- Discover the medication is outdated.
  - **Do not** administer. Follow procedures for documentation and completion of MIR (DHS 4630) or GER if actual error results (medication is not able to be administered as ordered).
  - Dispose of medication/treatment per procedures.
  - Immediately contact the pharmacy for replacement.
  - Note on Daily Log/Shift Report (or T-Log).
- If an individual's medication is missing, staff will immediately:
  - Notify the site manager or designated site manager on call.
  - Complete a Medication Incident Report (MIR — DHS 4630) or GER.
  - Order replacement from pharmacy.
  - Administer from last day prior to cycle; fill if available from the bubble pack.

## **Lesson 11: Going to a health care provider appointment**

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Bring appropriate documentation to the appointment.
2. Provide important and appropriate information to provider.
3. Ask required questions at the appointment.

4. Document information from the appointment .

Being able to provide accurate information to the health care provider and understanding medication orders is vital to the safety for the individuals we serve.

### **Objective 1: What to take with you**

Staff going to the doctor must verify the accuracy of all documents you take with you. Prior to going to the appointment, do the following:

1. Verify the appointment time and address.
2. Fill in the appointment information on **Physician's Visit/Orders (PVO) (DHS 4576)** or the **Therap Consultation Form (see Therap Services SOCP Reference Guide Medication Administration)**.
3. Verify the accuracy of all medications and treatments on the Physician's Visit Order (PVO)/Therap Consultation Form against the current MAR/TAR.
  - a. If you do not have time to verify the accuracy, take a copy of the current MAR/TAR and verify it while you are waiting to see the physician.

**Notes: Never take the original MAR/TAR with you. (See Appendix E for Physician's Visit Orders form.)**

### **Objective 2: Important information to provide and receive**

Accurate information plays an important role in the medication cycle as we have seen in the previous lessons.

- Health care providers need accurate and complete information as they try to ensure that medication is being used to the best benefit of the individual and as safely as possible.
- Specific types of information related to medication are an essential part of the health care record for an individual. This information is important for a doctor to safely prescribe medication.
- Medical information can be found in the individual program book, on the MAR/TAR, on the Physician's Visit Orders form or Therap Consultation Form and in the documentation book.
- You may need to take the individual program book or the documentation book with you to an appointment to give accurate, up-to-date information.
- **Note: Never take the original MAR/TAR to the appointment with you.**

- Have the physician write the new orders in the Physician’s Visit Orders section and sign the signature line or on a prescription order form.
  - Ensure that the written orders are clear. *E.g., if the order says between two and four drops, you must have the health care provider clarify specifically how many drops without a range; or ask the physician to specify area of a rash.*
  - If the order is not ongoing, the health care provider must specify an ending date or note “until healed” or some other instruction.
- If any clarifying information is directly related to the actual order, the health care provider must write the clarification on the order. You cannot alter or clarify the health care provider’s section of the PVO (DHS 4576) or the Therap Consultation Form or script.
- If you do not think the medication will be delivered from the pharmacy in time for the next dose, you can ask the physician to clarify right on the order “upon delivery from the pharmacy.” This allows continuation of a previous dose until the new one arrives.
- Staff will document appointment information in the Staff Information section such as:
  - Weight at the appointment;
  - Blood pressure;
  - Heart rate;
  - Temperature;
  - Verbal clarifications from the doctor;
  - How the client did at the appointment;
  - Any follow-up appointment information.
- **Note:** *You do not have to repeat all of this information in the Progress Notes or in the T-Log. If using a Therap Consultation Form, information will need to be entered into the T-Log and Health Tracking in Therap. You can refer to the PVO. **Bracket and information is required**, even if no notes are recorded in this section.*

### **Objective 3: Questions to ask at the appointment**

In order to understand completely a new medication’s benefits and risks and to use it wisely, you must have specific information about each new medication. Know the following:

1. What is the medication's purpose and desired effect? (Remember, some medications are ordered for off-label use.)
2. What is the response time?
3. What possible unwanted effects could arise?
4. Are there any possible interactions with other medications or food, including PRN medications? (E.g., does the individual only take medications with milk, or does he or she take an antacid?)
5. Are there any special administration and/or storage instructions? (E.g., does the individual chew his or her medications?)
6. Is this medication a controlled substance?
7. What should staff do if the following occurs?
  - A dose is missed.
  - A dose is refused.

**Objective 4: Upon returning home from the appointment, do the following:**

- Contact pharmacy staff and ensure they received the electronic order from the physician's office. If they have not, fax a copy of the PVO/order to the pharmacy.
- If using Therap, refer to Therap Services SOCP Reference Guide Medication Administration.
- Transcribe the new order onto the MAR/TAR and add signature, title, date and time below order if it is written on form DHS 4573.
- Note the appointment in the Progress Notes or a T-Log. You do not need to restate everything that is on the PVO or Consultation Form.
- Put new medication/treatments or changes in doses in the Daily Log/Shift Report (DHS 4629) for seven days to ensure staff know to watch for adverse reactions (or attach a T-Note to the Therap MAR/TAR).
- Update the PVO if necessary.
- Update Addendum to Physician Orders, if necessary.
- Add follow-up appointment to house calendar/appointment book, Daily Log/Shift Report and/or Therap calendar per house procedures.
- Notify the site manager or oncoming shift if the medication has not arrived at the home by the end of the shift.
- Bracket the order with a signature, title, date and time the documentation loop was completed.
- File the order in the client record.

## Lesson 12: Managing unusual situations in medication administration

**Desired outcome:** Maximizing safety for individuals who might benefit from medication as part of their treatment plan by being able to do the following:

1. Clarify and take orders outside of an appointment.
2. Understand physician addendum orders.
3. Transcribe preventive topical treatments.
4. Administer medications away from home.
5. Describe the situations when medication should be held.
6. Describe how to discontinue an order.

### Objective 1: Clarify and take orders outside of an appointment.

One of your responsibilities in safe medication administration is to know when you should get help or clarification. In order to safely administer medications, you must understand the licensed practitioner's order. You must get clarification before you administer a medication if its directions, doses, techniques or times of administration are unfamiliar to you or if they are against policy and procedure or standard reference information.

### Telephone Orders

Telephone Orders			
Facility name: _____		Address: _____	
Name: _____ <small>Individual's last name      First name</small>		Attending Physician: _____ <small>Name of the doctor called</small>	
Telephone Orders	Date ordered: _____	Date discontinued: _____	Orders: _____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
Signature : _____ <small>Person receiving the order: initial, last name and title</small>		Time: _____	
Physician's Signature : _____ <small>FAX, mail, hand carry: for signature</small>		Date: _____	
ORIGINAL COPY: Physician please sign and return within 48 hours.			

- This form is used every time a staff receives instructions from a physician or physician's nurse on the telephone regarding an individual. You can get the forms from your pharmacy or use the **Telephone Orders (DHS 4664)**.
- Be sure the phone order form contains the following information:
  - Individual's name;
  - Physician's name;
  - Name of the medication or treatment;
  - Dose or strength of the medication;

- Route of administration;
- Times per day the medication or treatment should be administered;
- Length of time it is to be administered, if applicable;
- Date the order is given and the time;
- Signature and title of the person taking the order over the phone.
- Transcribe the order as you would a written order from a PVO (or a Therap Consultation Form or script).
- File a copy of the order in the individual’s record.
- **Mail, hand carry or fax the order** to the physician’s office for signature.
  - If you do not make arrangements to pick up the signed order, provide the physician with a self-addressed stamped envelope or your fax number to return the signed telephone order.
  - When the signed telephone order is returned, place the signed original in the individual’s record on top of the copy that was used for transcribing the order.

### Fax clarification order:

DHS Oregon Department of Human Services		FAX COVER SHEET	
Date:	Sender:	Office Name:	Address:
To:	Office Name:	Address:	City:
Office Name:	Address:	City:	State:
Address:	City:	State:	Zip:
State:	Zip:	Phone No.:	Fax No.:
Phone No.:	Fax No.:	Total Pages:	
Fax No.:	Total Pages:		
Re:			
<input type="checkbox"/> Urgent <input type="checkbox"/> For review <input type="checkbox"/> Please comment <input type="checkbox"/> Please reply <input type="checkbox"/> Please recycle			
<p><b>Confidentiality Notice:</b> The information contained in this facsimile message is confidential and legally privileged. It is intended only for use of the individual named on the intended recipient, you are hereby notified that the disclosure, copying, or taking of any action in regards to the contents of this fax – except its direct use by the intended recipient – is strictly prohibited. If you have received this fax in error, please notify the sender immediately and destroy this cover sheet along with its contents and delete from your system, if applicable.</p>			

#### Receiving physician's orders:

A faxed copy of an order is legal and should be treated as an original doctor's order (*transcribed onto MAR, signed off and filed in the individual client book*).

#### Sending for advice from your physician:

Using your DHS-approved confidential statement fax cover sheet you can, if agreeable with your physician, use the fax process to get assistance from the doctor. You could write your concern on the fax and request advice. The physician could respond with a written order. You must have a doctor's signature as with all physician orders. If there is an order, it should be treated as an original doctor's order (*transcribed onto MAR, signed off and filed in the individual client book*).

***Fax your copy to the pharmacy and verify it was received. Remember to double-check with your pharmacy to make sure the order was received.***

## Objective 2: Understand physician addendum orders.

The **Addendum to Physician Orders, Medication Administration Irregularities, Physician's Directions (DHS 4621)** is used to provide physician's directions for each medication in the event that the original order cannot be followed.

Medication/treatment cannot be administered outside the parameters of the addendum without obtaining a telephone or faxed order from the health care provider.

- The medications/treatments included on the addendum form are at the discretion of the health care provider. This helps avoid unnecessary contact with the health care provider.
- Staff should transcribe the exact physician's order in the medication column.
- The doctor must fill in the procedure section and sign the form.
- Unless the physician specifically indicates on the addendum form how he/she wants notification, notification is not necessary.
- This is a physician's order. Staff cannot write over, modify or change written orders in any way. The only exception is you can put one diagonal line through the Medication section to discontinue an order (*signature/ title, date and time should be included as with any discontinued order*).

 <b>Addendum to Physician Orders</b> Medication Administration Irregularities Physician's Directions	
Client: <u>Joe Smith</u>	Physician: <u>Dr. Dolittle</u>
Current medications are listed on physician's orders. In the event that a medication or treatment is missed, I, <u>Dr. DeLittle</u> wish the following to occur:	
Medication:	Procedure to use when medication is missed (check one):
Risperidol 2 mg. TID by mouth	<input type="checkbox"/> a. Give medication as soon as he/she comes home. <input checked="" type="checkbox"/> b. Give up to <u>3</u> hours late, after that time lapses call for directions. <input type="checkbox"/> c. Give up to _____ hours late, after that time lapses wait for the next scheduled dose. <input type="checkbox"/> d. Call for directions immediately. <input type="checkbox"/> e. Other: _____
Lithium 250 mg. ii tabs by mouth TID	<input type="checkbox"/> a. Give medication as soon as he/she comes home. <input checked="" type="checkbox"/> b. Give up to <u>4</u> hours late, after that time lapses call for directions. <input type="checkbox"/> c. Give up to _____ hours late, after that time lapses wait for the next scheduled dose. <input type="checkbox"/> d. Call for directions immediately. <input checked="" type="checkbox"/> e. Other: <u>Do not give if within 2 hours of next dose. Give next dose only. Notify via FAX if this situation occurs.</u>
Write order EXACTLY as on the PVO	<input type="checkbox"/> a. Give medication as soon as he/she comes home. <input type="checkbox"/> b. Give up to _____ hours late, after that time lapses call for directions. <input type="checkbox"/> c. Give up to _____ hours late, after that time lapses wait for the next scheduled dose. <input type="checkbox"/> d. Call for directions immediately. <input type="checkbox"/> e. Other: _____
	<input type="checkbox"/> a. Give medication as soon as he/she comes home. <input type="checkbox"/> b. Give up to _____ hours late, after that time lapses call for directions. <input type="checkbox"/> c. Give up to _____ hours late, after that time lapses wait for the next scheduled dose. <input type="checkbox"/> d. Call for directions immediately. <input type="checkbox"/> e. Other: _____
	<input type="checkbox"/> a. Give medication as soon as he/she comes home. <input type="checkbox"/> b. Give up to _____ hours late, after that time lapses call for directions. <input type="checkbox"/> c. Give up to _____ hours late, after that time lapses wait for the next scheduled dose. <input type="checkbox"/> d. Call for directions immediately. <input type="checkbox"/> e. Other: _____
<b>NOTE:</b> A Medical Incident Report (MIR) needs to be completed. On the MAR/TAR form (circle on front/explanation on back). Physician/Nurse (per policy) must be notified (phone/fax) only if you are outside the parameters listed above. If there are any other medication administration errors/overdose/wrong dose/wrong person/wrong route, etc., it <b>MUST</b> be reported on a Medical Incident Report (MIR) and the doctor (or their designated back up) must be called immediately for instructions.	
Physician Signature: <u>Dr. DeLittle</u>	Date: <u>1-21-08</u>
<b>The additional time given by the physician on this addendum is calculated from the time the dosage is scheduled to be given on the MAR/TAR.</b>	
Policy #4.004 Attachment D - Mandatory: <span style="float: right;">Med. Training example DHS 4621 (01/10)</span>	

## Addendum to Physician Orders, Medication Administration Irregularities, Physician's Directions (DHS 4621)

### Objective 3: Transcribe preventive over-the-counter (OTC) topical treatments.

Over-the-counter topical treatments that are used to prevent a medical condition (e.g., *hand lotion to prevent dry hands*) are the only medications that do not require a physician's order. The individual or staff can determine that it is needed, purchase the OTC topical and transcribe it to the MAR as follows:

- If a topical treatment is purchased over-the-counter (OTC), the directions must be copied as written on the container onto the TAR with the same information included.
- For over-the-counter topical directions that indicate a range in time (e.g., 2–4 times per day), pick the greatest allowed times or number, (e.g., *if the directions say, "Apply every 2–4 hours," select every 2 hours*), pick the amount that gives the maximum number of applications in a 24-hour period.
- Add the phrase "Not to exceed."
- If you are concerned about possible medication interactions, consult the pharmacy to make sure the topical over-the-counter medication doesn't interact adversely with any current medications or treatments.

**(See Appendix F and G for handling OTC topicals.)**

### Objective 4: Administer medications away from home.

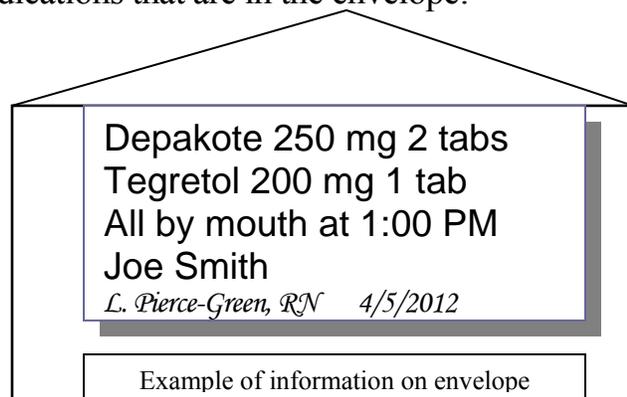
#### Outings with staff

- Only the staff that will be administering the medications will package them for the outing.
- Use one envelope for all meds for one administration time.

*Note: The size of envelope may vary based on the number of medications in it; make sure orders are legibly written on the outside.*

If you will be gone through two administration times, you will need to package an envelope for each of the medication administration times. On the envelope you must write the following for each of the medications that are in the envelope:

- Name of medication/dose;
- Name of individual;
- Time to be administered;
- Route of administration;
- Signature, title and date.



- If you have a medication with a different route of administration, you must have a separate envelope for that medication.
- Some medications cannot be put in these small envelopes (*e.g., ear drops, eye drops, treatments*). In this case, you could put the medication container into a baggie and use a self-adhesive label to mark the baggie with the name/dose, etc. as listed above. If refrigeration is needed, take the medication in a cooled/secured container.
- If going out for less than 72 hours (*i.e., camp with staff in attendance*):
  - Take the bubble packs and a printed copy of the MAR/TAR with you. Initial this MAR/TAR when you administer medications.
- **In all cases** the medication must be in a secure locked container (*bag, tackle box, etc.*) or in your possession at all times.
- Upon returning home, the staff must go to the MAR/TARs and double-check for completion:
  - On the original MAR/TAR the times of administration have been circled with a minimum of an entry on the back of the MAR/TAR for the first dose missed during the scheduled outing. (**See Therap Services SOCP Reference Guide Medication Administration.**)

**In a visit (of 72 hours or less) where staff will not be staying:**

- When possible, the person administering the medication(s) (including parents and/or guardians) will package the medications in envelopes following envelope preparation directions noted earlier.
- In the event the person who will administer the medication is not available or unable to package the medication, one staff person current in medication administration will package it; this will either be observed by the person scheduled to administer the medication or by another staff person current in medication administration.
- If you transport the individual, take the medication bubble pack and a printed copy of the MAR/TAR to compare labels, etc. You can set up the envelopes ahead of time to make it easier for the person administering the medication, but he or she must carefully compare the medications and MAR/TAR.

**If the parent or whoever will be administering the medications is at the house, that person can use the original MAR/TAR and pull medications from the bubble packs and put into the envelopes described above.**

- **Do not** leave the bubble pack with the family.
- For PRNs, count the number of doses administered in the last two days and send that same amount.

**For extended time away from home:**

- If the individual is going to be gone for more than 72 hours, you **must** have the pharmacy set up the medications for the person. You cannot put them in envelopes.
- For PRN use, count the number of doses administered in the last 30 days and send that amount in labeled envelopes as described in Objective 4 above.
- For extended outings, hospitalizations, etc., the following documentation must occur at home on the MAR/TARs:
  - Circle the first administration time of each medication. Indicate on the back of the MAR/TAR that the medication was prepared by the pharmacy for the extended period away from home.

**(See Therap Services SOCP Reference Guide Medication Administration.)**

**Objective 5: Describe the situations when medication should be held.**

You have the responsibility to safely administer medications. If you do not understand the order or are concerned that the medication is causing unwanted effects, contact the ordering physician. You will also hold the medication for any of the following reasons:

- A sudden change in physical or mental condition — Contact the physician, your site manager and the outreach nurse.
- The pharmacy label is illegible — Contact the pharmacy to order a new label.
- The individual refuses the medication — Individuals have the right to refuse. Try to find out why the person is refusing and follow the behavior support plan.
- The individual is unable to take the medications, e.g., she is having difficulty swallowing or is choking on oral tablets — Contact the physician.
- The individual says it is not his or her medication — Return all the medications to the medication passing station and do another check. Contact the pharmacy for clarification if needed.
- Parameters around the medication, e.g., the individual's heart rate must be above 60 prior to administering the medication. Today the heart rate is 56 — You will hold the medication and document on the MAR why it was held.

**Objective 6: Describe how to discontinue an order.**

Follow the steps noted below to discontinue a medication using the Medication Administration Record (MAR) (DHS 4573).

**DHS**  
Oregon Department of Human Services  
Seniors and People with Disabilities  
State Operated Community Program

**Medication Administration Record (MAR)**  
Month/Year: January 2006

Date of last order	Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
9/15/04	Tegretol 200mg. 2 tabs by mouth TID	8 am	m	m	m	m	m	m	m	m	m																								
		4 pm	m	m	m	m	m	m	m	m	m																								
		8 pm	m	m	m	m	m	m	m	m	m																								
1/5/06	Risperdal 2mg. 1 tab by mouth BID (Twice a day) M. Howard, RPTT 10am 4/5/06 D/G	8 am							m	m	m																								
		8 pm							m	m	m																								
1/9/06	Tetracycline 250mg 1 cap by mouth QID Before meals and before bed for 10 days M. Howard RPTT 1pm 1/9/06 M. Howard RPTT 10am 1/5/06 Discontinued M. Howard Rpt 2 1pm 1/9/06	7am																																	
		11am																																	
		4pm																																	
		8pm																																	

**Discontinuing Doctor's Orders**

1. Draw one diagonal line through order and write "D/C" Red ink is required.
2. Draw a line through the remaining blank squares. Use a ruler!
3. Put your signature/title/time/date in the order area.
4. Take the bubble pack or treatment out of the storage container and prepare for disposal, or return to the pharmacy.

Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature
mH	Marie Howard, RPTT						
hk	Heather Hoover, RPTT						

Name: First Name & Last name Allergies: Food, Medication, or NKA DOB: 2-5-70 Record checked by (date/initial): 12/30/05 MGA  
 Policy 4.004 Medication Administration Attachment B (no known allergies) Page 1 of 1 DHS 4573 (10/10)

**Medication Administration Record (DHS 4573)**

**Red ink** is required. Write "Discontinuing Doctor's Orders."

1. Draw one diagonal line through order and write "DC."
2. Draw a line through the remaining blank squares.
3. Use a ruler!
4. Put your signature/title/time/date in the order area.
5. Take the bubble pack or treatment out of the storage container and determine if it can be returned to the pharmacy *or* use the Drug Disposal Sheet (DHS 4590) and call the outreach nurse for pickup.

(See Therap Services SOCP Reference Guide Medication Administration for Discontinuation of Orders.)



# Appendix: B

## Medication Incident Report (DHS-4630)



### Medication Incident Report

Date stamp:

House Name: \_\_\_\_\_

Client Name: \_\_\_\_\_

Medication/Treatment: \_\_\_\_\_

Dosage: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

MIR #: \_\_\_\_\_

D.O.B: \_\_\_\_\_

Wrong Medication  
 Incorrect Dosage  
 Wrong Time  
 Medication Not Available  
 Details: (explain) \_\_\_\_\_

Medication Omission  
 Wrong Route  
 Medication Refusal (Omission)  
 Other: (explain) \_\_\_\_\_

Adverse Reaction  
 Narcotic Count  
 Medication Missing

**Action taken**

MIR completed  
 PVO Addendum followed

Phone order completed  
 Documented in Progress

Physician instruction  
 Other: (explain) \_\_\_\_\_

Physician notified:  Yes  No      Date: \_\_\_\_\_ Time: \_\_\_\_\_       Phone  FAX

Physician response: \_\_\_\_\_

Other: \_\_\_\_\_

Name and title of person completing MIR: \_\_\_\_\_ Date: \_\_\_\_\_

**Preventative action/Management review:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Review signatures**      Site Manager: \_\_\_\_\_      Program Manager: \_\_\_\_\_

Notification	Signatures	Date/Time	Fax	Phone	Delivery	In person
	County services coordinator <i>(Notification only)</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SM: _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NM: _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM: _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Review signatures**      Director: \_\_\_\_\_      Prog. Admin. (PA) \_\_\_\_\_      Nurse Mngr: \_\_\_\_\_

**DISTRIBUTION:** White and Yellow copies – SOCP Central Office; Pink copy - House

*Policy #4.004, #5.005 Mandatory* *DHS 4630 (05/10)*

# Appendix: C

## Medication Administration Accountability Sign-Off Sheet (DHS-4663)



**DHS**  
Oregon Department of Human Services  
Seniors and People with Disabilities  
State Operated Community Program

### Medication Administration Accountability Sign-Off Sheet

House: \_\_\_\_\_ Month: \_\_\_\_\_

Two (2) staff from each shift must sign off below, signifying that all scheduled meds, PRN, treatments and narcotic(s) have been checked, dispersed and documented per medication administration procedures. OAR 309-049-0075 (3)(5)(6)(8).

Day	Day shift signatures (2)	Check time	Error Y/N	Swing shift signatures (2)	Check time	Error Y/N	Night shift signatures (2)	Check time	Error Y/N
1st									
2nd									
3rd									
4th									
5th									
6th									
7th									
8th									
9th									
10th									
11th									
12th									
13th									
14th									

Policy #4.012 Attachment B (Mandatory)

Page 1 of 2

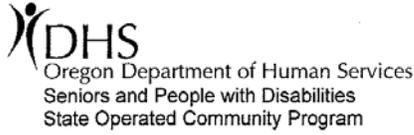
DHS 4663 (9/09)

# Appendix: D

## Medication Returns to PayLess Pharmacy

 <b>MEDICATION RETURNS TO PAYLESS PHARMACY</b>						Pharmacy to complete
FACILITY			Completed by:		Date Rec'd _____	
PATIENT NAME One Patient per form			Date _____		Verified By _____	
Facility to Complete						
Rx#	Drug	Strength	Quantity	Return Reason Code	Denial Code	Credit = <input type="checkbox"/>
FACILITY RETURN REASON CODE:		CONTROLLED DRUGS (Schedule II, III, IV, V of Federal Comprehensive Drug Abuse Prevention Control Act of 1970) CANNOT be returned for credit. They must be destroyed on Premise per state and Federal Law.			DENIAL CODE:	
A = Med Discontinued	D = Med Change				1. Below Minimum \$ 2. Medicaid 3. Damaged 4. Form Incomplete 5. Not Refrigerated 6. Other	
B = Moved out of Facility	E = Error					
C = Patient Expired	F = Other					
*Complete this Portion:						
C = Patient Expired, Date _____						
D = Medication Change, Specify _____ For Medication Change, please call Customer Care immediately at (503)626-9436 or (800) 330-3665						
E = Error, Specify _____ For Medication Error, please call Customer Care immediately at (503)626-9436 or (800) 330-3665						
F = Other, Specify _____ _____						
Notes to Payless _____ _____ _____						
<ul style="list-style-type: none"> <li>• Medications must be returned within 30 days of Fill Date in order to be considered for credit.</li> <li>• Medications requiring refrigeration must be returned refrigerated or no credit will be given.</li> <li>• No Return Form needed if only 1 to 3 pills remaining in bubble pack card</li> <li>• For questions regarding returns please call (503) 372-1761 or (800) 330-3665 ext: 1761</li> </ul>						

**Appendix: E**  
**Physician's Visit Orders (PVO) (DHS 4576)**



**Physician's Visit Orders (PVO)**

Client name: \_\_\_\_\_ Date: \_\_\_\_\_  
Name of physician/provider: \_\_\_\_\_ Other specialist: \_\_\_\_\_  
Reason for visit: \_\_\_\_\_

**Current medication/treatments – dosage and time**

**Oral medication**

**Treatment medication**

**PRN medication/treatment**

**Prosthetics**

**Special diets**

**Known allergies/adverse drug reactions**

Client:  
Policy #4.004 Attachment A

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DHS 4576 (06/10)

Page 1

# Physician's Visit Orders (PVO) (DHS 4576)

**Psychiatric diagnosis**

**Significant findings of examination**

**Physician's orders (medication, treatment, revisions, etc.)**

**Attention physician:** Please state time period for all orders (ie., take until gone, use until rash disappears, etc.)

Pharmacy: \_\_\_\_\_ Phone: \_\_\_\_\_ FAX: \_\_\_\_\_

Physician's signature/provider: \_\_\_\_\_ Date: \_\_\_\_\_

**Staff Information**

Staff signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Appendix: F

## How to handle written over-the-counter topical treatments

DHS Oregon Department of Human Services Seniors and People with Disabilities State Operated Community Program		Medication Administration Record (MAR)		Month/Year: <u>January 2006</u>																													
Date of last order	Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1/7/06 OTC	Neosporin Cream (not to exceed) 4 applications topically for scratches and abrasions (no doctors order needed) <i>M. Howard HITT2, 1pm 1/7/06</i>	PRN																															
		<p><b>OTC treatment by staff</b></p> <ol style="list-style-type: none"> <li>1. Put on MAR/TAR with directions from the box.</li> <li>2. Clearly mark PRN.</li> <li>3. Follow documentation as with any other PRN.</li> <li>4. DC just like any other when done with the treatment</li> <li>5. Include route.</li> </ol> <p>In this situation, "Best Practice" would be to have a Doctor's order even though it is not required.</p> <p>If you have an ongoing issue like a rash, you should be consulting your PCP</p>																															
Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature		
mh	<i>Maria Howard HITT2</i>																																
hh	<i>Heather Hoover HITT2</i>																																
Name: <u>First Name &amp; Last name</u>		Allergies: <u>Food, Medication, or NKA</u>		DOB: <u>2-5-70</u>		Record checked by (date/initials): <u>12/30/05 MDC</u>																											
Policy 4.004 Medication Administration Attachment B		(no known allergies) Page <u>1</u> of <u>1</u>		DHS 4573 (10/10)																													

1. Put on MAR/TAR with directions from the box.
2. Clearly mark PRN.
3. Follow documentation as any with other PRN.
4. Discontinue (DC) just like any other order when done with the treatment.

In this situation, best practice would have a doctor's order even though it is not required.

If you have an ongoing issue like a rash, you should be consulting your PCP.

# Appendix: G

## How to handle client-purchased over-the-counter medications

DHS Oregon Department of Human Services Seniors and People with Disabilities State Operated Community Program		Medication Administration Record (MAR)																															
		Month/Year: <u>January 2006</u>																															
Date of last order	Medication	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1/5/06	Carmex Lip Balm-apply freely to lips topically (Joe is carrying in his pocket) <i>Marie Howard HTT2 1pm 1/7/06</i>	INFO ONLY																															
		<p><b>Client purchases OTC</b></p> <ol style="list-style-type: none"> <li>Put on MAR/TAR with directions from the box.</li> <li>Clearly mark "information only."</li> <li>No initialing needed.</li> <li>Make note indicating individual is carrying the item (team reviews).</li> <li>D/C just like any other order when done with the treatment.</li> <li>Include route.</li> </ol> <p>Do not put these on your PVO if you clearly understand that these are OTC purchased treatments.</p> <p>If the doctor orders the treatments, you must transcribe them as with any other order</p>																															
Initials	Signature	Initials	Signature	Initials	Signature	Initials	Signature																										
<i>MH</i>	<i>Marie Howard, HTT2</i>																																
<i>HK</i>	<i>Heather Hoover, HTT2</i>																																
Name: <u>First Name &amp; Last name</u>		Allergies: <u>Food, Medication, or NKA</u>		DOB: <u>2-5-70</u>		Record checked by (date/initial): <u>12/30/05 MCH</u>																											
Policy 4.004 Medication Administration Attachment B		(no known allergies)		Page <u>1</u> of <u>1</u>		DHS 4573 (10/10)																											

1. Put on MAR/TAR with directions from the box.
2. Clearly mark "information only."
3. No initialing needed.
4. Make note indicating individual is carrying the item (team reviews).
5. Discontinue (DC) just like any other order when done with the treatment.

Do not put client-purchased OTC medications on your PVO if you clearly understand that these are OTC-purchased treatments.

If the doctor orders the treatments, you must transcribe them just like any order.

## **Appendix: H**

### **Glossary of health terms**

#### **Abrasions** (*≈ scrape*)

1. A scraping away of a portion of a surface.
2. The wearing down or rubbing away or removal of the superficial layers of skin or mucous membrane in a limited area.

#### **Airway obstruction**

1. An abnormal condition of the respiratory pathway characterized by a mechanical impediment to the delivery or to the absorption of oxygen in the lungs, as in choking or obstructive lung disease.

#### **Allergy reaction** (*allergy + reaction*)

##### *Allergy*

1. *An abnormally high acquired sensitivity to certain substances such as drugs or pollens, or to microorganisms.*
2. *Symptoms may include sneezing, itching and skin rashes.*

##### *Reaction*

1. *The state resulting from such a response.*
2. *The response of cells or tissues to an antigen, as in a test for immunization.*

#### **Bite/sting**

##### *Bite*

1. *Seizure with the teeth.*
2. *A wound or puncture made by a living organism.*
3. *An impression made by closure of the teeth upon some plastic material, e.g., wax.*

##### *Sting*

1. *To pierce or wound painfully with or as if with a sharp-pointed structure or organ, as that of certain insects.*
2. *To introduce venom by stinging.*
3. *To cause to feel a sharp smarting pain by or as if by pricking with a sharp point.*

#### **Bleeding**

1. Escape of blood from an injured vessel.
2. Losing blood, externally or internally.

## **Blister**

1. A local swelling of the skin that contains watery fluid and is caused by burning, infection or irritation.
2. A skin vesicle filled with fluid or a collection of body fluids. Can be caused by burns or trauma.

## **Bruises**

1. A localized collection of blood that accumulates in an organ, tissue or body space as the result of leakage from a broken blood vessel. Hematomas sometimes develop within the nasal cartilage when the nose is fractured.

## **Burn**

1. Injury to tissues caused by the contact with heat, flame, chemicals or electricity.

## **Choking**

1. The inability to breathe because the trachea (airway, neck) is blocked, constricted or swollen shut.

## **Concussion**

1. Damage to the brain caused by a violent jarring or shaking, such as a blow or an explosion.



*Symptoms of a concussion include:*

- Headache
- Disorientation as to time, date or place
- Confusion
- Dizziness
- Vacant stare or confused expression
- Incoherent or incomprehensible speech
- Weakness or lack of coordination
- Amnesia for the events immediately preceding the blow
- Nausea or vomiting
- Double vision
- Ringing in the ears

*Note: These symptoms may last from several minutes to several hours.*

## **Cut**

1. To penetrate with a sharp edge; strike a narrow opening in.
2. To separate into parts with or as if with a sharp-edged instrument; sever.
3. To sever the edges or ends of; shorten.

**Decubitus**

1. The act of lying down; the position assumed in lying down.
2. A decubitus ulcer.

**Dermal ulcer (*dermal + ulcer*)***Dermal*

1. *Of or relating to the skin or dermis.*
2. *Pertaining to the dermis.*
3. *Pertaining to the skin; cutaneous; dermic.*

*Ulcer*

1. *A site of damage to the skin or mucous membrane that is characterized by the formation of pus and death of tissue; it is frequently accompanied by an inflammatory reaction.*

**Dislocation**

1. The displacement of any part, especially a bone or bony articulation.
2. Forced separation and misalignment of bones in a joint cavity.
3. Displacement of a body part, especially the temporary displacement of a bone from its normal position.

**Fracture**

1. The breaking of a part, especially a bone.
2. A break or rupture in a bone.

**Frostbite**

1. Injury or destruction of skin and underlying tissue — most often that of the nose, ears, fingers or toes — resulting from prolonged exposure to freezing or subfreezing temperatures.
2. Skin and subcutaneous tissue damage caused by prolonged exposure to extreme cold. Characterized by cessation of blood circulation, frostbite. Results in a number of signs and symptoms including edema and pain.

**Hematoma(s)**

1. A localized swelling filled with blood resulting from a break in a blood vessel.

**Hypothermia**

1. A potentially fatal condition that occurs when body temperature falls below 95°F.
2. Low body temperature, such as from cold weather, or from artificial induction to decrease metabolism.
3. A reduction of core body temperature to 32°C (95°F) or lower, due to exposure in cold weather or induced as a means of decreasing metabolism of tissues.

**Infection**

1. Invasion by and multiplication of pathogenic microorganisms in a bodily part or tissue, which may produce subsequent tissue injury and progress to overt disease through a variety of cellular or toxic mechanisms.
2. An instance of being infected.
3. An agent or a contaminated substance causing a person to become infected.
4. The pathological state resulting from having been infected.
5. An infectious disease.

**Laceration**

1. A jagged wound or cut.
2. The process or act of tearing tissue.
3. A torn, ragged, mangled wound.

**Lesion**

1. A wound or an injury.
2. A localized pathological change in a bodily organ or tissue.
3. An infected or diseased patch of skin.

**Loss of consciousness**

1. A partial or complete loss of consciousness with interruption of awareness of oneself and one's surroundings.

**Pain**

1. A feeling of distress, suffering or agony caused by stimulation of specialized nerve endings.
2. An unpleasant sensation occurring in varying degrees of severity due to injury, disease or emotional disorder.

**Perineal irritation** (*perineal + irritation*)*Perineal*

1. *The diamond-shaped region of the body between the pubic arch and the anus.*

*Irritation*

1. *Extreme incipient inflammatory reaction of the body tissues to an injury.*
2. *The normal response of a nerve or muscle to a stimulus.*
3. *The evocation of a reaction in the body tissues by the application of a stimulus.*

**Poisoning**

1. The state of being poisoned.
2. The act of administering a toxic substance.
3. The condition or physical state produced by the ingestion of, injection of, inhalation of, or exposure to a poisonous substance. Identification of the poison ingredients and presentation of a container label are critical to expeditious diagnosis and treatment.

**Pressure sore** (*≈ Bedsore*)

1. A pressure-induced ulceration of the skin occurring in persons confined to bed for long periods. Also called *decubitus ulcer*, *pressure sore*.

**Puncture**

1. A wound or opening made by piercing.
2. The act of piercing or penetrating with a pointed object or instrument; a wound so made.
3. An injury caused by a sharp, narrow object deeply penetrating the skin.

**Rash/hive***Rash*

1. *A skin eruption.*
2. *A spotted pink or red skin eruption that may be accompanied by itching and is caused by disease, contact with an allergen, food ingestion or drug reaction.*

*Hive*

1. *A well-defined, elevated, edematous skin lesion.*
2. *A skin condition characterized by welts that itch intensely, caused by an allergic reaction, an infection or a nervous condition.*

**Redness**

1. Having a reddish or coppery skin color.
2. Red color or pigment; the chromatic color resembling the hue of blood.
3. A response of body tissues to injury or irritation; characterized by pain, swelling, redness and heat.

**Scrape** (*≈ abrasions*)

1. A scraping away of a portion of a surface.
2. The wearing down or rubbing away or removal of the superficial layers of skin or mucous membrane in a limited area.

## **Scratch**

1. To scrape or rub a surface lightly with the nails or with a sharp or jagged instrument.
2. A slight wound.
3. To make shallow cuts on a surface.
4. To make a thin grating sound.

## **Skin tear** (*skin + tear*)

### *Skin*

1. *The outer covering of the body.*
2. *It serves as a protective barrier against microorganisms. It helps shield the delicate, sensitive tissues underneath from mechanical and other injuries.*

### *Tear*

1. *A rip or rent in a material or structure.*
2. *To rip, rend or pull apart by force.*

## **Sprain/strain**

### *Sprain*

1. *An injury to a joint, with possible rupture of some of the ligaments or tendons but without dislocation or fracture.*
2. *Wrenching or twisting of a joint, with partial rupture of its ligaments.*

### *Strain*

1. *To exert physical force in a manner that may result in injury, usually muscular.*
2. *To separate solids or particles from a liquid with a filter or sieve.*
3. *Damage, usually muscular, that results from excessive physical effort.*

## **Sunburn**

1. A skin injury characterized by redness, tenderness and possible blistering that results from exposure to actinic radiation from the sun.

## **Surgical incision** (*surgical + incision*)

### *Surgical*

1. *Of, relating to or characteristic of surgeons or surgery.*
2. *Used in surgery.*
3. *Resulting from or occurring after surgery.*

### *Incision*

1. *A cut into a body tissue or organ, especially one made during surgery.*
2. *The scar resulting from such a cut.*

## **Swelling/edema**

### *Swelling*

1. *Transient abnormal enlargement of a body part or area not due to cell proliferation.*

### *Edema*

1. *Fluid or water retention.*
2. *An accumulation of an excessive amount of watery fluid in cells, tissues or serous cavities.*



Symptoms of edema are varied, depending on the cause. In general, weight gain, puffy eyelids and swelling of the legs may occur due to excess fluid volume.

### **References**

MedicineNet.com (2011). November 16, 2011. Retrieved from <http://www.medterms.com>.

Skeptic's corner (2011). November 16, 2011. Retrieved from <http://jerskepticscorner.blogspot.com/2011/01/bright-idea-rescue-incandescents.html>.

TheFreeDictionary (2011). November 15, 2011. Retrieved from <http://medical-dictionary.thefreedictionary.com>.



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