BASIC HEALTH AND MEDICATIONS

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I. VITAL SIGNS

As a result of completing this section, you will be able to:

1. Demonstrate the correct procedure to measure temperature, pulse, respirations and blood pressure.

2. Recognize when to notify a licensed health care provider.

VITAL SIGNS

Vital signs refer to a person's temperature, pulse, respirations, and blood pressure. Measuring these accurately provides information about a person's health.

Learning how to take accurate vital signs is an important responsibility for a health care worker.

TEMPERATURE

Temperature measures the amount of heat in a person's body. When a person's muscles work, heat is produced. When a healthy person works hard, more heat is made. The body perspires to help keep its temperature normal. When a person becomes too cool, the body shivers so the muscles will make heat to help warm it up. When a person's health is abnormal, the body temperature may also be abnormal.

Temperatures may be taken with a thermometer placed in the mouth (oral), under the arm (axillary) or in the rectum (rectal).

Normal body temperature varies depending on the method used to measure temperature.

- The normal oral temperature is between 96 and 99 degrees Fahrenheit (F).
- The normal axillary temperature is between 95 and 98 degrees F (one degree lower than oral).
- The normal rectal temperature is between 97 and 100 degrees F (one degree higher than oral).

TYPES OF THERMOMETERS

A glass thermometer is a hollow glass tube containing mercury. Mercury expands when exposed to heat such as from a person's mouth, underarm or rectum. The outside of the thermometer is marked with lines and numbers. This allows you to accurately measure the temperature.

HOW TO READ A THERMOMETER

Oral:

Bulb Oral Thermometer Stem

Used to measure oral and axillary temperatures. Oral thermometers usually have an elongated bulb and may have a blue or green stem end.

Rectal:

Bulb Rectal Thermometer Stem

Used to measure temperatures by inserting the thermometer into the rectum. The rectal thermometer has a rounded bulb and may have a red marking at the stem end.

Digital:

A digital thermometer eliminates human error and variation in reading a glass thermometer. Digital thermometers may be used to measure oral, axillary or rectal temperatures. A disposable probe cover protects the stem when the thermometer is in use.

Some thermometers measure temperature by insertion into the ear canal. Once inserted into the canal, an accurate reading is produced in a matter of seconds. A clean disposable plastic ear tip must be used for each person.

NOTE:	**If you question the reading of the digital or ear thermometer, check to see if you need a new battery. You may also check the accuracy of your reading with another thermometer.**

TASK:

Take temperature using glass thermometer.

STANDARD:

Glass mercury thermometers must be shaken down before temperature is taken. Oral temperatures must be taken for 3 minutes; axillary temperatures must be taken for 10 minutes; and rectal temperatures must be taken for minimum of 3 minutes. Manufacturer's instructions must be followed for other than mercury thermometer devices. The person's temperature must be recorded on his or her chart.

TOOLS AND EQUIPMENT:

- Water-soluble lubricant for taking rectal temperature
- Person's chart
- Work sheet
- Pencil/pen
- Thermometer

PERFORMANCE GUIDE:

- Wash hands
- Assemble equipment

TASKS	Yes	No
Verify person's identity and explain procedure		
Take person's temperature		

PROCEDURE GUIDE (Read directions carefully):	YES	NO
Oral temperature using glass mercury thermometer: a. Disinfect thermometer and rinse in cool water b. Check level of mercury and shake down below numbers. c. Place under person's tongue for 3 minutes.		
Axillary temperature using glass mercury thermometer: a. Check level of mercury and shake down below numbers. b. Place thermometer under person's armpits. c. Hold person's arm tightly against chest. d. Leave thermometer in place for 10 minutes.		
Rectal thermometer using glass mercury thermometer: a. Check level of mercury and shake down if necessary. b. Lubricate bulb end of thermometer. c. Have person lie down on side. d. Insert thermometer in rectum 1 and 1/2 inches. e. Hold thermometer in place 3-5 minutes.		
Remove, wipe and read thermometer.		
Shake down mercury thermometer.		
Clean glass thermometer.		
Wash hands.		
Record reading in daily log.		
Report abnormal reading.		

Note: Procedure for using digital and ear thermometers varies by brand. Discard used probe cover or ear tip immediately after use without touching it. Wash hands. Record reading.

PROCEDURE FOR CARE AND USE OF THERMOMETERS

Glass thermometers may be used to take oral, rectal or axillary temperature. Thermometers must be labeled as "oral", "rectal" or "axillary" and used only for that method. Glass thermometers must be cleaned before and after each use.

To clean the thermometer:

1. Wipe any visible soilage from the thermometer with a clean tissue or gauze square.

2. Using a cotton ball or gauze square moistened with rubbing alcohol, wipe the thermometer from the cleanest to the dirtiest end.

    - Discard the cotton.
    - Rinse the thermometer in cool water.

3. Disposable thermometer sheaths may be used to cover the thermometer when taking temperatures. The thermometers must still be cleaned before and after use.

4. Refer to manufacturer's instructions for cleaning digital and ear thermometers.

Student Name _____

RETURN DEMONSTRATION:

Take Temperature Using Glass Thermometer

ACHIEVEMENT INDICATORS: The Trainee

Tasks	Yes	No
Washed hands before and after procedure		
Assembled equipment		
Explained procedure for taking temperature		
Took temperature in prescribed manner		
Cleaned and replaced equipment		
Record/reported temperature and any pertinent observations		

TOOLS AND EQUIPMENT:

- Oral glass thermometer
- Tissue or paper towel
- Alcohol wipes
- Paper and pencil
- Disposable thermometer sheaths

PULSE

A pulse measures how fast the heart is beating. A normal adult pulse beats 50 to 100 times each minute. The **most common way to measure the pulse is to feel the artery in the wrist**. This is called the **radial** pulse. Another place to measure the pulse is over the carotid artery in the neck. The pulse may also be heard with a stethoscope over the heart.

TASK: Take pulse.

STANDARD: Pulse must be counted for 60 seconds. All readings must be recorded.

TOOLS AND EQUIPMENT:

- Pen or pencil
- Paper
- Watch with second hand

Performance Guide	Yes	No
Gather equipment		
Wash hands		
Explain procedure		
Place two or three fingers over the radial artery (Do not use thumb)		
Count beats for 60 seconds using watch or clock with a second hand		
Recount beats if pulse is irregular		
Note regularity and strength of beat		
Write number of beats and note if irregular		
Wash hands		
Report abnormal readings (below 50 or above 100) and irregularities		

RESPIRATIONS

Respiration rate measures the number of breaths a person takes in one minute. One respiration is equal to the chest rising when the lungs fill with air (inhalation) and chest falling when the air leaves the lungs (exhalation) one time. Respirations may be counted by watching the number of times the chest rises and falls in one minute. They may also be measured by placing the hand on the chest or stomach and feeling the number of times the chest rises and falls in one minute. Normal rate is 12-28.

TASK: Take respirations.

STANDARD: Respirations must be counted for 60 seconds. All readings must be recorded.

TOOLS AND EQUIPMENT:

- Pencil or pen
- Paper
- Watch with second hand

Performance Guide	Yes	No
Wash hands		
Explain procedure		
You may want to place your fingers on person's wrist while counting respirations		
Count person's respirations for 60 seconds		
Note any irregularities of respirations		
Record respiration rate		
Wash hands		
Report abnormal findings (above 28 or below 12) and irregularities		

BLOOD PRESSURE

Blood pressure measures the force of the blood on the inside of the blood vessel. A blood pressure has two numbers. **The higher number or systolic should be between 90 and 150. The lower number or diastolic should be between 60 and 90.**

TASK: Take blood pressure.

TOOLS AND EQUIPMENT:

- Alcohol and cotton
- Pencil or pen
- Paper
- Blood pressure cuff
- Stethoscope

The performance guide for taking blood pressures can be found on the following page.

Performance Guide - TAKING BLOOD PRESSURE	Yes	No
Assemble equipment		
Wash hands		
Clean ear pieces and diaphragm of stethoscope with alcohol and cotton balls		
Explain procedure		
Locate brachial pulse on inside of elbow		
Wrap and fasten deflated cuff smoothly and snugly around person's upper arm. (Place cuff at least one inch above elbow; point arrow on cuff at brachial pulse)		
Place earpieces of stethoscope in your ears		
Place diaphragm of stethoscope over the brachial pulse		
Close valve on air pump		
Pump air to inflate cuff until the dial points to 170		
Deflate cuff slowly and at constant rate		
Watch numbers as needle falls		
Listen for first thumping sound		
Note number where first thump (systolic pressure) is heard		
Note number where last clear thump (diastolic pressure) is heard		
Deflate cuff completely		
Repeat steps if necessary		
Record reading		
Wash hands		
Report abnormal readings (above 150/90 or below 90/60)		

II. SEIZURES

LEARNING OBJECTIVES

At the completion of the chapter on seizures, you will be able to:

1. Recognize seizure activity
2. List the steps for seizure first aid
3. Document a seizure
4. List what not to do when a seizure occurs

A seizure occurs as a result of abnormal electrical activity in the brain. It is like a short circuit. As a result, a muscle or group of muscles in the body may contract and relax alternately for a short period of time. The person having the seizure usually has no control over the seizure activity. Any body movement that is controlled by the brain may respond abnormally to the electrical activity. Most seizures last from a few seconds to several minutes in time. Some of the more common types of seizures are described in the following pages.

EPILEPSY: RECOGNITION AND FIRST AID

SEIZURE TYPE	WHAT IT LOOKS LIKE	OFTEN MISTAKEN FOR	WHAT TO DO	WHAT NOT TO DO
CONVULSIVE	Sudden cry, fall, rigidity, followed by: muscle jerks, frothy saliva on lips, shallow breathing or temporary suspended breathing, bluish skin, possible loss of bladder or bowel control, usually lasts less than 5 minutes. Normal breathing then starts again. There may be some confusion and/or fatigue, following return to consciousness.	Heart Attack Stroke	Look for medical identification. Protect from nearby hazards. Loosen ties or shirt collars. Place padding under head. Turn on side to keep airway clear. Reassure when consciousness returns. If multiple seizures, or if one seizure lasts longer than 10 minutes, take to emergency room.	Don't put any hard implement in the mouth. Don't try to hold tongue. It can't be swallowed. Don't try to give liquids until person is awake. Don't use rescue breathing unless respirations are absent. Don't restrain.
NON-CONVULSIVE ABSENCE (Also called Petit Mal)	A blank stare, lasting only a few seconds, most common in children. May be accompanied by rapid blinking and/or some chewing movements of the mouth. Child having seizure is unaware of what's going on during seizure, but quickly returns to full awareness once it has stopped. May result in learning difficulties if not recognized and treated.	Daydreaming Lack of attention Deliberate ignoring of adult instructions.	No first aid necessary.	

SEIZURE TYPE	WHAT IT LOOKS LIKE	OFTEN MISTAKEN FOR	WHAT TO DO	WHAT NOT TO DO
SIMPLE PARTIAL (Also called Jacksonian)	Jerking begins in fingers or toes, can't be stopped by person's, but person stays awake and aware. Jerking may proceed to arm, and sometimes spreads to whole body and becomes a convulsive seizure.	Acting out, bizarre behavior.	No first aid necessary, unless seizure becomes convulsive; then first aid as noted above.	
SIMPLE PARTIAL (Also called Sensory)	May not be obvious to onlooker other than person's's preoccupied or blank expression. Person experiences a distorted environment. May see or hear things that aren't there; may feel unexplained fear, sadness, anger, or joy. May have nausea, or experience odd smells, and have a generally "funny" feeling in the stomach.	Hysteria Mental illness Psychosomatic illness Parapsychological or mystical experience.	No action needed other than reassurance and emotional support.	

SEIZURE TYPE	WHAT IT LOOKS LIKE	OFTEN MISTAKEN FOR	WHAT TO DO	WHAT NOT TO DO
COMPLEX PARTIAL	Usually starts with blank stare, followed by chewing, followed by random activity. Person appears unaware of surroundings, may seem dazed and mumble. Unresponsive. Actions clumsy, not directed. May pick at clothing, pick up objects, try to take clothes off. May run, appear afraid. May struggle or flail at restraint. Once pattern established, same set of actions usually occur with each seizure. Lasts a few minutes, but post-seizure confusion can last substantially longer. No memory of what happened during seizure period.	Drunkenness Intoxication on drugs Mental illness Indecent exposure Disorderly conduct Shoplifting	Speak calmly and reassuringly to person and others Guide gently away from obvious hazards. Stay with person until completely aware of environment Offer to help get person home	Don't grab hold unless sudden danger (such as a cliff edge or an approaching car) threatens. Don't restrain Don't shout Don't expect verbal instructions to be obeyed.
ATONIC SEIZURES (Also called Drop Attacks)	The legs suddenly collapse. After 10 seconds to a minute, the person recovers, regains consciousness, and can stand and walk again.	Clumsiness Lack of good walking skills. Normal "childhood" stage	No first aid needed unless the person hurts self in falling.	

SEIZURE TYPE	WHAT IT LOOKS LIKE	OFTEN MISTAKEN FOR	WHAT TO DO	**WHAT NOT TO DO**
MYOCLONIC SEIZURES	Sudden brief, massive muscle jerks that may involve the whole body or parts of the body. May cause person to spill what they were holding or fall off a chair.	Clumsiness Poor coordination	No first aid needed.	
INFANTILE SPASMS	Starts between 3 months and two years. If a child is sitting up, the head will fall forward, and the arms will flex forward. If lying down, the knees will be drawn up, with arms and head flexed forward, as if the baby is reaching for support.	Normal movements of the baby, especially if they happen when the baby is lying down.	No first aid needed.	

All seizures must be documented using appropriate form. Seizures which must be reported to the health care professional are:

a) any person having a seizure with no known history of seizure.
b) any change in frequency or type of seizure.

PERFORMANCE CHECKLIST -- FIRST AID FOR "GENERALIZED TONIC-CLONIC" SEIZURE

This is the checklist that will be used to assess your knowledge and skill in giving first aid to a person who is having a generalized tonic-clonic seizure. Please review it prior to coming to the classroom experience. Do not write on this form.

TRAINEE'S NAME _____ DATE _____

___ Remains calm.

___ If others are present, offers a brief explanation, reassurance, and ways they can help.

___ Eases person to the floor or to a safe, comfortable position.

___ Refrains from restraining person's body movements and lets the seizure run its course.

___ Removes hazards from the area.

___ Moves person from area if clearly dangerous and unable to remove hazard.

___ Assures mouth and nose are unobstructed, and refrains from placing/forcing an object into mouth.

___ Loosens tight clothing.

III. MEDICAL EMERGENCIES

OBJECTIVES FOR ALLERGIC-REACTION (ANAPHYLACTIC) SHOCK

After reading this part, you will:

1. Be able to recognize the signs and symptoms of allergic-reaction (anaphylactic) shock.
2. Be able to identify the correct responses to the signs and symptoms of anaphylactic shock.
3. Identify some of the common causative agents.

Allergic-Reaction (Anaphylactic) Shock is a medical emergency.

An example of an emergency condition you need to know about is anaphylactic shock. It can start from an allergic reaction to an allergen, such as food, insect or snake bite, or a medication. Anaphylactic shock is a generalized systemic reaction, frequently fatal, which usually occurs within minutes after contact with an allergen. Any drug can cause this reaction, but antibiotics commonly cause this problem.

The signs and symptoms include:

Respiratory Problems:

1. Rapidly progressive respiratory distress.
2. Sneezing or coughing.
3. Tightness of chest.
4. Wheezing.
5. Cyanosis (turning blue).

Skin Symptoms:

1. Sense of warmth
2. Flushing of the skin
3. Generalized itching
4. Hives

Cardiovascular Signs

1. Pulse changes (becomes weak and thready)
2. Skin becomes pale
3. Blood pressure falls
4. Circulatory failure can lead to coma and death

Gastrointestinal Signs

1. Nausea and vomiting
2. Abdominal pain

There is a rapid progression of symptoms.

Drugs usually used for treatment:

Adrenalin (epinephrine)

Benadryl

Hydrocortisone

Aminophylline

Barbiturates (short-acting)

Atarax

HOW TO PREVENT ALLERGIC (ANAPHYLACTIC) SHOCK

- Always know allergies of the person to whom you are administering medications.

- Be aware that some individuals are more prone to allergic reactions, such as persons with hay fever, asthma, and food allergies.

- Always be prepared for allergic and anaphylactic reactions. REMEMBER -- they can occur anytime even if the person has never exhibited previous allergies.

AGENTS ASSOCIATED WITH ALLERGIC (ANAPHYLACTIC) SHOCK

Any drug can cause allergic shock, but the most common drugs are antibiotics.

Other causes may be insect bites, some vaccines, blood and blood products, allergy tests and injections, and some foods, such as -

- Eggs

- Nuts (Brazil nut, black walnut, pecan, hazel nut, hickory nut, pistachio, chestnut, English walnut, almond)

- Legumes (peanut, chickpea, pinto bean, soybean, kidney bean)

- Fish

- Shellfish

- Seeds (sesame, cottonseed, flax seed, poppy seed, sunflower seed, caraway)

IV. INFECTION CONTROL

After reading this material on infection control, you will be able to:

1. **Identify the six links of the "chain of infection."**
2. **Identify the process to prevent the spread of infection or communicable disease.**
3. **Identify the proper handwashing technique.**
4. **Identify those activities when proper handwashing technique must be performed.**
5. **Identify cleaning techniques which can limit spread of infection and communicable disease.**
6. **Identify signs and symptoms of selected common infections and describe appropriate staff action.**

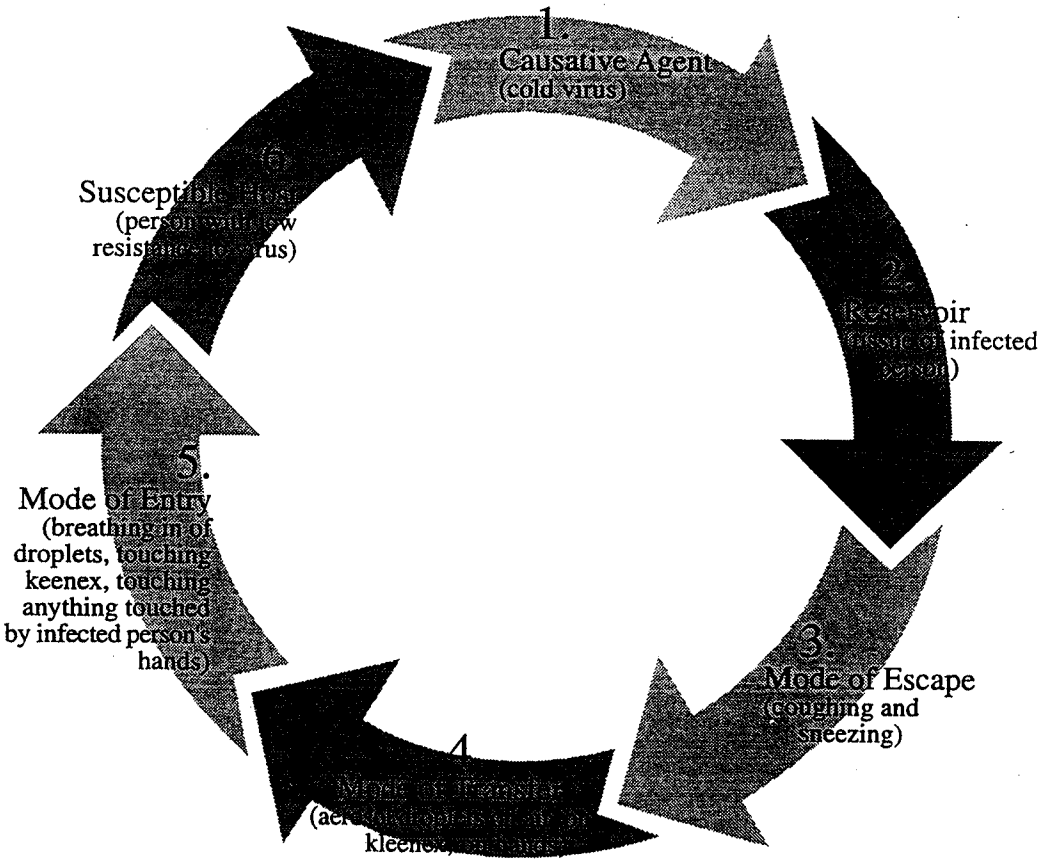
COMMUNICABLE DISEASES

Communicable diseases are diseases caused by bacteria, virus, fungus and parasites, also called "germs." The majority of "germs" are harmless to human beings, but many do cause disease. "Germs" are found everywhere; in the ground, in the air, on the skin, in the mouth and nose, and in the large bowel. They are transmitted (spread) from one person to another, or from an animal to person, by either direct or indirect contact. "Direct" means close contact between two persons. "Indirect" means from one person to another person through the air, water, food, surfaces, or insects.

Bacteria are very small, one cell, organisms (living things) which cause infections. Examples of diseases caused by bacteria are staph infection, strep throat and tonsillitis. A virus is smaller than bacteria. Example of diseases caused by virus are the common cold, flu, polio, German measles, mumps, hepatitis, chicken pox, herpes simplex (cold sores), and shingles. A Fungus is a low form of plant life. Fungus-caused diseases are mild, but persistent and difficult to cure. Examples are nail infection, yeast infection, ringworm and athlete's foot. Parasites are organisms which feed on other organisms. Parasites are responsible for malaria, sleeping sickness, head and body lice, scabies, worms, and other health problems.

A person or animal who harbors and spreads an organism-causing disease in others, but who may not be ill, is called a carrier. Carriers are discovered through laboratory testing.

There is a series of factors or events that are necessary for the transmission of communicable diseases referred to as the "chain of infection." Each link of the chain must be present in logical sequence to produce disease. The following graph shows how this works.



SOME EXAMPLES OF SPECIFIC LINKS IN THE CHAIN ARE LISTED BELOW:

1. Causative Agent:

Fungus

Virus

Bacteria

Parasites

2. Reservoir (Storage site):

People, animals and plants

Water, food and soil

Clothing

Environmental surfaces:

Floors, countertops, bed linens, etc.

3. Mode of Escape (ways the disease can leave the reservoir):

Feces and urine

Saliva

Mucus from nose and throat

Skin lesions

Animal excreta

Pus or discharge from any body opening

Perspiration and tears

Semen

Blood

4. Mode of Transfer (ways the disease can transfer by direct contact):

Hands of others and hands of self

Environmental surfaces

Polluted water and food

Flies

Coughing and sneezing

Kissing and sexual intercourse

Bites and scratches

5. Mode of Entry (ways the disease can enter **the new** host):

Breathing of droplets, spray, contaminated air

Eating contaminated food, or drinking contaminated water

Absorption through the skin

Body openings: mouth, ears, nose, vagina, rectum

Touching hands to mouth

Breaks in the skin

6. Susceptible Host:

People

Animals

Insects

Birds

Plants

CONDITIONS WHICH CAN LEAD TO EXPOSURE TO INFECTIOUS DISEASE

Certain conditions and circumstances may increase the likelihood of "catching" an infectious disease: Sociologic conditions--like crowding or closeness; Biologic conditions--like lowered resistance to infection; Physical condition of person such as being overworked, overtired or under a great deal of stress.

After acquiring the infectious microbe, the person becomes infected and may become ill. The time period between acquiring the infection and developing the symptoms of the illness is called the incubation period. This period may range from several hours to several days to even months or years before symptoms of the disease become apparent. Each disease has its own incubation period. If a person passes the disease to another person or animal, he/she is said to be infectious, and the persons exposed to the infection are called contacts. On the other hand, if the person becomes infected, but does not develop recognizable symptoms, the infection may be identified only by laboratory tests. He/she may, however, still be infectious for other people and be a "carrier".

A carrier is a person who:

1. **Harbors a specific "pathogen" without observable signs or symptoms of the disease; and**
2. **Has the potential to spread the organism to others.**

Following you will find a listing of a variety of signs/symptoms that may be associated with communicable diseases, but must be considered as signs of illness that should have medical attention.

Signs/Symptoms of a likely or possible communicable disease are:

1. Red or runny eyes
2. Sneezing or nasal discharge
3. Cough, particularly if persistent or productive
4. Sores or crusts on the ears, scalp, face or body, particularly if red and swollen or draining
5. Any rash or break in the skin
6. Sore throat
7. Swelling and tenderness of glands, around the face, neck or genital area
8. Fever, suggested by hot, flushed face
9. Nausea and/or vomiting
10. Pain and stiffness of neck
11. Headache
12. Jaundice (yellowing of whites of eyes and/or skin)
13. Diarrhea and/or persistent abdominal pain
14. Sudden or drastic change of behavior, especially in nonverbal persons

Should any of the symptoms occur while the person is at school, day activity or work, the community residential staff must be notified immediately. Make sure each location has the person's home telephone number.

Cleanliness is the best weapon to fight infections. Cleanliness measures are handwashing; washing linens and clothing in hot soapy water; washing, vacuuming and damp dusting all surfaces. Hair brushes, toothbrushes, and drinking glasses and the like should not be shared.

Most disease-causing germs are transferred by hand contact. Proper handwashing technique can prevent this transfer. Proper handwashing technique is something that must be practiced by all.

As staff, it is your responsibility to provide a safe and clean environment.

Everyone must be particularly careful to wash their hands:

1. whenever body contact occurs
2. after handling personal articles
3. before and after food preparation
4. before and after eating
5. after using a handkerchief or tissue
6. after using the toilet
7. before/after smoking

Everyone must use proper handwashing techniques. The illustration that follows provides more detail on the handwashing techniques:

- Always rub hands thoroughly (friction).
- Always wash and rinse hands under running water. Do not fill sink bowl.

HOW TO WASH YOUR HANDS:

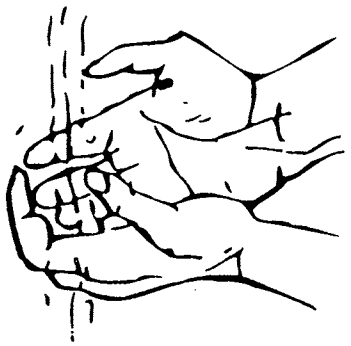
1. **Wet hands.**
2. **Apply soap thoroughly. Get under nails and between fingers and fingertips.**
3. **Use rotating frictional motion. Rub hands together while you count to 20.**
4. **To wash fingers and spaces between them, interlace the fingers and rub up and down.**
5. **Rinse well under running water from the wrist area to the ends of your fingertips.**
6. **Dry thoroughly.**
7. **Turn water off with towel.**

HANDWASHING

IMPORTANT THINGS TO REMEMBER

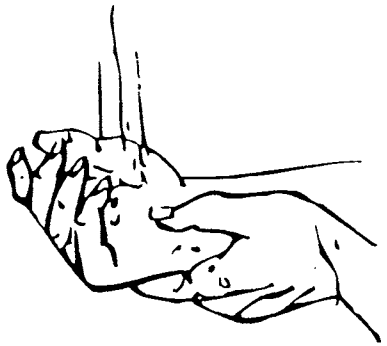
Always rub hands thoroughly (friction)
Always wash and rinse hands under running water. Do not fill sink bowl.

1. Wet hands

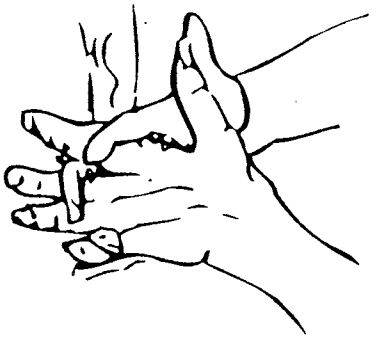


2. Apply soap thoroughly... get under nails and between fingers.

3. Use a rotating frictional motion...rub hands together while you count to 20.

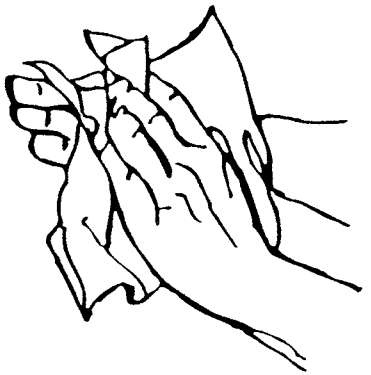


4. To wash fingers and the spaces between them, interlace the fingers and rub up and down.



5. Rinse well under running water from the wrist area to the fingertips.

6. Dry thoroughly.



7. Turn off water with towel.

It is important that you know about several common communicable diseases. The following tables list what the disease is, what to look for, what to do, and how to document the event.

BACTERIAL INFECTIONS

IMPETIGO:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Small red area which progresses to pus-filled area Itching Burning Pain Enlarged lymph glands in skin lesion area When pus-filled areas break, areas become crusty	Impetigo is a contagious skin infection which spreads most easily among infants, children and the elderly. It can complicate other skin conditions marked by open lesions. It is often mistaken for fever blisters or cold sores. Risk of impetigo is increased by poor hygiene, anemia and malnutrition. Spread by direct contact, and spreads quickly.	Universal precautions Good handwashing technique Give medications as ordered (usually antibiotics) Frequent baths or soaks as ordered to remove crusts Use antiseptic soap Discourage scratching, as this spreads impetigo Keep nails short and clean Do not share personal articles Observe other persons closely to detect impetigo on their skin	Medication, baths and soaks as Ordered Appearance of lesions and rash

BACTERIAL INFECTIONS

GASTROENTERITIS:

SIGNS AND SYMPTOMS:	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION:
Fever Abdominal pain Nausea and vomiting Headache Chills Loss of appetite	Gastroenteritis may be caused by bacteria, virus, parasites, drug reactions, and food allergies. Bacterial causes include staphylococcus, salmonella, and shigella. Gastroenteritis may follow eating contaminated or inadequately processed foods, or food that has not been handled properly. It can be caused by contact with infected animals or persons	Universal precautions - always wash hands often and after contact with persons. Teach infected person to follow proper handwashing, especially after using bathroom and before eating. Wear appropriate protective equipment when disposing of feces or fecal contaminated articles. Observe person for rectal bleeding and lower right abdominal pain. Take vital signs. Handle food properly.	Accurate record of intake and output Record signs and symptoms Record vital signs

VIRAL INFECTION

HERPES SIMPLEX I:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Tingling and itching at site Fever Sore throat Eruptions of vesicles on tongue, gums, cheeks and lips	Herpes Simplex I is commonly known as cold sores and fever blisters. Transmitted by oral and respiratory secretions and drainage from lesions. Herpes viruses are extremely contagious	Give medications per physician's orders. Use Universal Precautions. Teach person importance of proper handwashing. Advise person with cold sores to avoid kissing anyone. Oral lesions - have person use a soft toothbrush, eat a soft diet and rinse mouth with a saline solution. Observe closely for eye lesions - notify health professional immediately if eye lesion noted. Teach person to keep hands away from lesions.	Record appearance of lesions and orders as carried out. Record teaching.

VIRAL INFECTION

SHINGLES:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Fever Malaise (feeling of weakness and discomfort) Severe deep pain Itching Numbness, prickling, tingling Small red lesions which quickly fill with clear fluid or pus Pain	Reactivation of herpes virus that has laid dormant since a previous episode of chicken pox.	Follow physician's orders for lotion, pain medication, antibiotics. Keep person clean. Give pain medication per physician's orders. Observe for signs of additional lesions.	Record medications and treatments. Record appearance of lesions.

VIRAL INFECTION

CHICKEN POX:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Slight fever Feelings of weakness and/or discomfort. Loss of appetite Rash progresses to lesions filled with fluid which break and form scabs. Itching	Chicken Pox (common and highly contagious) can occur at any age, but most common in 2-8 year-olds. Transmitted by direct contact with secretions from the respiratory tract and less often from skin lesions.	Discourage scratching which spreads lesions to other areas. Keep nails short and clean. Encourage proper hand washing. Follow physician's orders for dealing with itching (soda baths, lotion, anti-histamine). Take temperature if person is warm to touch. Do not send person to day program, work or school.	Document medications and treatments when given. Record appearance of rash and symptoms of person. Record temperature.

VIRAL INFECTION

RUBELLA:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Rash on face spreading to trunk and extremities Loss of appetite Low grade fever (99-101) Enlarged lymph glands Feeling of weakness Runny nose Headache	Rubella (German measles) is a disease which produces a three-day rash and enlarged lymph glands. The virus is transmitted by contact with blood, urine, stools, mucus or contaminated articles. Incubation period is 16-18 days. Can spread to others 10 days before and 5 days after rash appears. If contacted during first 3 months of pregnancy serious birth defects may develop. Immunization is available for prevention	Give medication as ordered. Avoid exposing pregnant women. Notify health professional who will notify local health department. Do not send person to school, day program, work, etc. Pregnant staff should not be in home at this time. Take person's temperature if warm to touch.	Record signs and symptoms. Record medications given. Record temperature.

VIRAL INFECTION

RUBEOLA (MEASLES):

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Fever Sensitivity to light Weakness Loss of appetite Nasal discharge Red eyes Hacking cough Spots in mouth A rash which itches, starts at the ears and spreads downward over the body. Rash begins to fade in 2-3 days. About 2-3 days after rash appears, the person may have a temperature of 103-105 degrees, severe cough, puffy red eyes, and nasal discharge.	Rubeola (measles) is caused by a virus and spreads easily by breathing contaminated droplets sprayed into the air by a person with the disease sneezing and coughing. Incubation period is 10-14 days. About 5 days after the rash appears, other symptoms disappear and the person is no longer contagious. Measles are one of the most common and serious communicable childhood diseases. The disease is becoming more prevalent in adolescents and adults. Serious and even fatal complications can occur.	Take temperature Give medication as ordered Encourage bed rest Encourage fluid intake Darken room and provide sunglasses Notify licensed personnel if condition worsens Licensed professional will notify health department Do not send person to school, day program or work.	Record temperature Record signs and symptoms Record medication given

PARASITES:

SCABIES:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Itching - worse at night Rash	Scabies - skin infection caused by itch mite. Spread by skin or sexual contact. All members of household should be examined if one member has scabies.	Use prescribed medication. Keep nails clean and short. Discourage scratching. Have person bathe thoroughly. All contaminated clothing and linens must be washed in hot water or dry cleaned. Good handwashing technique. Report any signs or symptoms of infection.	Treatment given. Appearance of rash. Amount of scratching. Signs and symptoms of infection.

PARASITES

LICE:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Mild to severe itching **Gray white eggs in hair** **Rash**	**Head and body lice lay their eggs in body hair or clothing fibers. After the eggs hatch, they feed on human blood.** **Anyone coming in contact with a person who has lice can get lice.** **Indirect contact with personal items of the infected person may also spread lice to others.**	**Shampoo hair with special medicated shampoo.** **Scrub under fingernails with nail brush and the prescribed shampoo.** **Comb hair with a fine-toothed comb to remove the eggs.** **Bathe in warm soapy water and apply prescribed lotion or ointment to body.** **Clothing and linens should be washed in hot soapy water or dry cleaned.** **Keep nails short and clean.** Discourage scratching. Brushes, combs, pick, etc. must be cleaned with the medicated shampoo.	**Signs and symptoms present.** **Treatment given.**

PARASITES

PINWORMS:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Rectal itching especially at night. Disturbed sleep Irritability Skin irritation Nausea Loss of appetite and weight.	Pinworms are small roundworms which live in the lower digestive tract. Hand-to-mouth transmission occurs after contact with contaminated bed linens, clothing, toilet seats, food, etc. Continual re-infection is common. Usually all members of the house are treated at once to eliminate the disease.	Good handwashing. Medication administered as ordered. Discourage nail biting and keep nails short. Report outbreaks to school or day programs. Daily washing of underwear and bed clothes. Do not shake linens.	Medication given. Note any side effects of drug. Record signs and symptoms.

FUNGAL INFECTIONS

RINGWORM:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Lesions may be round or vary in appearance. These may progress to pus-filled lesions. Itching.	Ringworm may affect scalp, body, nails, feet, groin, and bearded skin. Transmitted by direct contact with lesions or indirectly by contact with contaminated articles (shoes, towels, shower stalls, etc.)	Apply topical antifungal agent as ordered. Wet dressing as ordered for removal of scabs and scales. Observe for secondary infections. Teach person not to share clothing, hats, towels, pillows, etc. Keep lesions covered. **Discourage scratching to prevent scarring and secondary infection.** **Keep nails short and clean.**	Treatment as ordered and carried out. Appearance of lesions. **Signs and symptoms noted.**

FUNGAL INFECTIONS

ATHLETE'S FOOT:

SIGNS AND SYMPTOMS	DESCRIPTION OF CONDITION	STAFF ACTION	STAFF DOCUMENTATION
Rash on feet	Athlete's foot is a fungus growth of the feet caused by excessive moisture, insufficient air circulation, or abrasion. The infection is usually between the toes and on the soles of the feet.	Soak feet with prescribed solution. Dry feet well, especially between toes. Apply prescribed medication to feet. Have person wear sandals or shoes that "breathe". Feet should be washed daily and kept cool and dry. White cotton socks should be worn.	Treatment as ordered and carried out. Appearance of feet.

UNIVERSAL BLOOD AND BODY FLUID PRECAUTIONS

The Occupational Safety and Health Administration (OSHA) issued final regulations on job exposure and blood borne pathogens on December 6, 1991. Universal precautions apply to blood and other body fluids containing visible blood. Blood is the single most important source of human immunodeficiency virus (HIV), Hepatitis B virus (HBV), and other blood- borne pathogens which cause disease in humans. Through certain practices and training, the risk of exposure can be reduced or prevented. Protective clothing, equipment, and environmental controls can be used to prevent exposure.

1. Disposable gloves are to be worn during procedures where blood and body fluids are handled or when touching surfaces or equipment soiled by blood and body fluid. This is extremely important for staff who have cuts, abrasions, chapped hands or dermatitis. Gloves are not a substitute for handwashing. Gloves are to be discarded after a single use, and not washed for reuse. Gloves are not to be used if they are peeling, cracked, discolored, or have tears or punctures. Hands are to be washed before and after gloving.

2. Wear disposable gloves when handling soiled linen and clothing which has been grossly soiled by blood or body fluids.

3. Wear utility gloves when cleaning spills of blood and body fluids. Utility gloves may be disinfected and reused. Discard if cracked, torn, peeling or discolored.

4. Wear gowns when splashes to skin or clothing with blood and/or body fluids are likely to occur.

5. Masks and eye protectors are to be worn when splashes or a fine mist (aerosolization) of blood or body fluids are likely to occur.

6. Wash hands between contacts with various persons in home and immediately if soiled with blood or body fluids. Use a utility or bathroom sink, not a sink in the kitchen or where food is prepared.

7. Handwashing may be the only precaution necessary for many contacts in the health care facility. Gloves are not indicated when contact with person is unlikely to result in exposure to blood or potentially infectious body fluids.

8. Gloves are to be removed as demonstrated. Gloves are to be disposed of in the biohazard container **only if soiled with blood.** Biohazard container is a container so labeled to minimize exposure to the hazard (contaminated material).

9. Laundry and equipment soiled with blood or body fluids shall be handled as little as possible. The laundry is to be bagged at the location and not sorted at this time. Soiled laundry should be placed in leakproof bags when there is a potential for leakage. Hot water and soap will kill HIV and Hepatitis B virus; therefore, use standard laundry techniques using hot water and detergent to clean soiled laundry.

10. Do not eat, drink, smoke, or touch your nose, mouth, or eyes when working in areas where exposure may occur.

11. Remove protective clothing for disposal or place in laundry bag for laundry. Immediately following completion of procedure, wash hands.

12. Reusable equipment soiled with blood or body fluids is to be disinfected immediately, using the solution approved by the health facility. A solution of common household bleach and water, mixed according to the Center for Disease Control (CDC) policy, can be used. This solution must be mixed daily, dated and discarded after 24 hours.

13. The environment and equipment is to be kept clean and orderly. Follow the employer's written schedule for cleaning and decontamination.

14. Spills are to be cleaned as soon as possible after a spill occurs. Absorbent material, such as paper towel, can be used to clean the spill. Soiled paper towels are be placed in the biohazard container. After absorbing the spill, flood the area with disinfectant solution and let stand for 20 minutes. Use paper towel to absorb the disinfectant and place in the biohazard container for disposal.

15. Place disposable syringes and needles and other sharp items in puncture resistant biohazard containers for disposal. The biohazard container should be located in an area where disposable items are commonly used. Do not recap, bend, break or remove needles from disposable syringes.

16. Any needlestick, cut or exposure to blood or body fluids is to be washed immediately with disinfectant soap. Then, immediately report this exposure to your employer and supervisor for follow-up care and documentation.

17. OSHA requires that the employer make the Hepatitis B vaccination series available to all employees exposed to blood or body fluids on the job. There is no cost to the employee. OSHA also requires post-evaluation of all exposures to blood or body fluid on the job.

18. The employer is also required to provide disposable resuscitation masks for use in emergency situations.

19. The Employer's Infection Control Plan must be posted at your work site.

20. You will be required to attend annual training and updates on universal blood and body precautions and procedures to be followed in providing care to individuals in your residential community.

BLOOD BORNE PATHOGENS

I. Definitions:

Blood Borne Pathogens - Pathogenic microorganisms (tiny organisms) that are present in human blood and can cause disease in humans. These include, but are not limited to, Hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Occupational Exposure - Higher risk of infection due to exposure of skin, eye, mucous membrane, or parenteral (outside the intestine) contact with blood or other potentially infectious materials that may result from performing your duties.

Other potentially infectious materials - The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, amniotic fluid, saliva in dental procedures. Watch for situations where it may be difficult or impossible to tell the difference in the type of body fluids.

Source Individual - any individual, living or dead, whose blood or other potentially infectious material may be a source of occupational exposure to the employee.

Exposure Incident - a specific eye, mouth, other mucous membrane, break in the skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of employee duties.

II. Significant Exposure - to Blood or Body Fluids

A. Needlestick injury - (note: a needlestick injury with a non-contaminated needle - one that has had no contact with another individual - does not constitute an exposure).

B. Prolonged contact with blood on hands which are chapped, abraded or afflicted with dermatitis.

C. Splashing of bloody secretions into eye or mouth.

D. Exposure to non-bloody fluids does not constitute an exposure (example: saliva, tears, sweat, urine).

III. Significant Exposure Follow-Up

A. If an employee suspects a significant exposure, the following procedures should be followed:

1. Immediately wash the exposed area of skin with soap/water, and rinse the exposed mucous membrane with warm water.

2. Notify immediate supervisor.

3. Follow responsible employer agency policies and procedures.

B. If a person is suspected of receiving significant exposure to blood or body fluids, the following procedures should be followed:

1. Notify the consultant RN working with that person.

2. The incident will be addressed by the responsible team, or on an individual basis. Documentation will be via Incident Report and/or Clinical Support Progress Note.

IV. Handwashing

Handwashing is one of your best defenses against spreading infection. Always wash your hands with non-abrasive soap and water at the end of your shift and after removing gloves.

Be sure to wash your hands and remove any protective clothing before: eating, drinking, smoking, applying cosmetics or lip balm, handling contact lenses. Keep your hands away from your face, and especially your nose, mouth and eyes.

HIV/AIDS

I. Human Immunodeficiency Virus (HIV) is the virus considered to be the cause of the disease Acquired Immunodeficiency Syndrome (AIDS). The virus is found in body fluids (blood, semen, blood products, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial fluid and amniotic fluid) of infected individuals. Transmission of the virus is associated with a person's contact with these fluids from a person carrying the virus. HIV is not transmitted via the fecal/oral route or by casual contact. HIV is a sexually-transmitted virus.

Infection with HIV causes a process of gradual and accelerating destruction of the body's immune system.

As the presence or absence of the virus in body fluids cannot always be known, all individuals are considered capable of transmitting HIV.

Universal precautions must be practiced by all who have the potential for contact with body fluids. Following universal precautions can reduce the risk of transmission of HIV/AIDS.

II. Definitions:

HIV -- Human Immunodeficiency Virus - the virus capable of producing AIDS.

AIDS -- Acquired Immunodeficiency Syndrome - an illness characterized by the following:

a. Failure of the immune system to defend against other diseases, leading to severe opportunistic infections and tumors.

b. The virus' direct attack on nerve cells.

HIV antibody -- the antibody which develops within 1-6 months as a result of the presence of HIV in the bloodstream. The virus cannot be detected in the blood- stream; therefore, the presence of the HIV antibody measures the presence of HIV infection in an individual.

Source Individual - any individual, living or dead, whose blood or other potentially infectious body fluids may be a source of occupational exposure to an employee or individual living in the residential community.

High-Risk Factors - persons are at risk for the transmission of HIV through the interpersonal sharing of blood, tissue or other body fluids, such as semen, vaginal secretions or other body cavity fluids. Risk factors include:

a. unprotected sexual contact with persons who are infected with HIV, or those who engage in high-risk behavior.

b. sharing of intravenous drug materials.

Universal Precautions - a system of infectious disease control which assumes that every direct contact with blood or body fluids is infectious.

Exposure Incident - eye, mouth, or other mucous membrane, non-intact skin, or other parenteral contact with blood or other potentially infectious materials resulting from performing your duties.

HEPATITIS B

I. Hepatitis B - is an infection of the liver caused by the Hepatitis B virus. The virus is found in body fluids (blood, semen, blood products, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial [membrane sac surrounding the heart] fluid and amniotic fluid) of infected individuals. Transmission of the virus is associated with an individual's contact with these body fluids from a person carrying or infected by the Hepatitis B virus.

Hepatitis B is sometimes known as "Serum Hepatitis." Some of the symptoms of acute illness are: loss of appetite, nausea and vomiting, fatigue and headache, followed by jaundice. This illness usually lasts four to eight weeks. Chronic liver disease may follow the infection, and bring serious consequences.

Possible Means of Contracting Hepatitis B:

1. Direct injection of contaminated blood by needle, tattooing, ear piercing, or illicit drug use with a needle and syringe.

2. Transfer of infected blood through small, often unrecognized, breaks in the surface of the skin, and through larger skin lesions, such as burns or scratches.

3. Introduction of the infected blood onto the inner surface of the mouth or eyes.

4. Introduction of saliva containing blood or semen, which carries the virus onto surfaces of the mouth, eyes, vagina or rectum. Mouth-to-mouth or mouth-to-body contact, sexual activity, and kissing may be potential routes for transmission of Hepatitis B.

5. Indirect transfer of infected blood from obviously soiled surfaces or objects.

Hepatitis B is **not** spread in the following ways:

1. Through the air, or by coughs and sneezes.
2. Contact with feces of infected persons.
3. Use of drinking fountains, swimming pools, toilet seats.
4. Social contact in schools, workshops and similar social settings.

As the presence or absence of active infection cannot always be known, all individuals are considered capable of transmitting the disease.

Universal precautions must be practiced by all who have the potential for contact with body fluids to reduce the risk of transmission of Hepatitis B.

II. Definitions:

HBV -- Hepatitis B Virus

HBsAG -- Hepatitis B surface antigen. Found on the surface of the virus. Can be identified in serum 30-120 days after exposure to HBV, and can persist for variable periods.

Anti-HBs: Antibody to HBsAG. Found circulating in the bloodstream after a resolved infection. Antibody is responsible for long-term immunity, and may also indicate passive antibody from Hepatitis B Immune Globulin (HBIG) or Hepatitis B vaccine.

Chronic HBV Carrier:

1. Carriers are people who have the virus in the blood (positive Hepatitis B antigen), but show no symptoms of disease. Although they are not sick themselves, carriers can pass the virus to others, causing them to develop Hepatitis B.

2. The carrier state is more prevalent among the following groups: institutionalized people or those living in group settings; persons in kidney dialysis units; persons who receive multiple blood transfusions; and promiscuous male homosexuals.

   7%-35% of institutionalized mentally retarded persons will be carriers.

   Approximately 3 persons/1000 in the general population will be carriers.

3. Recovery from infection with Hepatitis B virus provides lifelong immunity to repeat infection by this virus.

Hepatitis B Vaccine:

A form of immunization against Hepatitis B. The vaccine is a series of three injections administered within a six-month period.

Only recombinant vaccines (artificially produced in a lab and containing no human plasma) are being used in the U.S. for routine immunization.

Adequate antibody response to the vaccine occurs in greater than 90% of healthy adults after completion of series.

The arm is the recommended site for Hepatitis B vaccination of adults and children.

III. Post-Vaccination Testing/Revaccination - Hepatitis B vaccine when given in the deltoid (muscle covering the shoulder joint) produces protective antibody in greater than 90% of healthy persons. Therefore, testing for immunity after vaccination is not recommended. Testing for immunity is advised for persons who: previously received the vaccine in the buttock; persons greater than 50 years of age; persons with known HIV infection; and persons who have had an exposure incident.

IV. Routine Vaccine Boosters - Available data indicates the vaccine-induced antibody levels decline steadily with time. Up to 50% of adults vaccinated who responded adequately to vaccine may have low or undetectable antibody levels by 7 years after vaccination. These individuals may receive boosters as currently recommended by the Center for Disease Control (CDC).

V. Post-Exposure Follow-Up - Any employee determined to have had a significant exposure to blood or body fluids shall receive a medical follow-up at no cost to the employee.

Significant exposure includes:

1. Needle prick accidents.
2. Bites by carriers.
3. Scratches by a carrier which draws blood.
4. Exposure of mouth/eye membrane with carrier's blood.
5. Exposure of broken skin to blood, saliva or semen from a carrier.

Follow these procedures: Wash exposed area thoroughly, notify your supervisor or nurse, and consult with your physician as soon as possible. It may be recommended that you be given Hepatitis B immune globulin which can help prevent development of Hepatitis B.

Hepatitis B Immune Globulin (HBIG) is human plasma containing high levels of Anti HBs (antibody to HBV). It is intended for immediate, short-term protection after a known significant exposure to blood or body fluids.

TUBERCULOSIS (TB)

Tuberculosis (TB), which was thought to be under control in the U.S. and many other areas of the world, is now on the rise. Drugs traditionally used to treat TB are not effective in many of the TB cases today, which is alarming. Some authorities feel this may be the result of infected individuals not taking medications in the past as prescribed.

This increase in the number of TB cases has been noted in persons with weakened immune systems. Persons at risk for TB are those infected by the Human Immunodeficiency Virus (HIV), the homeless, substance abusers, immigrants from countries where TB has remained a problem, and in persons residing in crowded living conditions. TB is appearing more often in the 25-45 year-old group, and among racial and ethnic minorities.

SIGNS AND SYMPTOMS:

Coughing up thick mucous (sputum), sometimes bloody, weakness, night sweats, weight loss, lack or loss of appetite, fever, hoarseness.

DESCRIPTION OF CONDITION:

TB is a communicable disease caused by the germ *Mycobacterium tuberculosis,* which most often affects the respiratory (lung) system, although it may affect other body systems. It is spread by inhaling droplets when an infected person coughs, sneezes, speaks, sings, or spits, and spreads droplets into the air from their infected respiratory system. About 5% of persons infected will develop active TB within a year. Others will "wall off" the germ, which may become active at anytime, even years later, when the immune system weakens. Although TB is usually found in the lung, it can affect any body system. TB is not as easily spread as once thought. The droplets from an infected person must actually be inhaled (breathed in) by another person.

Treatment consists of various drug combinations and schedules over a long period (months). Cases of drug-resistant TB are now being seen, and these cases are difficult to treat.

Persons in community placement developing signs and symptoms that you think may be TB must be evaluated by their physician as soon as possible. Positive tests for TB must be reported to the public health department within 24 hours, so they can start identifying close contacts of the infected person. Contacts will be tested for TB and treated when indicated. Preventive therapy may be ordered for 6-12 months. The health department follows TB cases for response and adherence to treatment in order to ensure protection for the community.

<u>TB is detected by:</u>

1. Skin test (PAD) which, if positive, may indicate a person has been infected with the TB organism. A positive skin test does not necessarily mean a person has TB. Further testing must be done.

2. Signs and symptoms.

3. Chest X-ray which shows lesions, but does not distinguish active from inactive TB.

4. Stains and cultures of sputum, wound drainage or other body fluids.

5. Computed tomography (CT) or magnetic resonance imaging (MR) scans used to detect lung damage or confirm the diagnosis.

TREATMENT:

Treatment includes multiple drug combinations. Two, three or four drug combinations are usually ordered by the physician. The most common drugs ordered are:

Isoniazid (IN)
Rifampin
Pyrazinamide
Ethambutol
Streptomycin

Other drugs and combinations are used when necessary. Treatment often extends to 9-12 months. Occasionally, surgery is necessary to remove infected tissue. It is important to make sure the person takes medication as ordered by the physician. After a few weeks on the medication, a person with TB is no longer contagious.

STAFF ACTION:

1. Follow physician's orders.

2. Encourage person to eat prescribed diet and to get adequate rest.

3. Teach person to cough and sneeze into a tissue and to dispose of tissue properly (provide a covered container).

4. Insure person keeps appointments with physician.

5. Follow proper hand washing procedure.

7. Be knowledgeable of medication dosage and possible adverse drug reactions. Notify health professional immediately if these occur.
8. Weigh person accurately as ordered.

STAFF DOCUMENTATION:

- Medication and other prescribed treatment.
- Signs and symptoms of disease.
- Diet taken.
- Appointments attended.
- Any drug reactions noted.
- Notification of health professional of any problem, along with date and time notified.
- Record weight.

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V. INTRODUCTION TO MEDICATIONS

LEARNING OBJECTIVES

As a result of reading this material, you will be able to:

1. Identify the uses of medication.
2. Recognize that any medication can be abused.
3. Recognize that some medications are controlled substances and there may be special procedures for handling these medications.
4. Recognize the uses of medication:
   - Prevention of disease (health maintenance)
   - Diagnosis of disease
   - Treatment of disease
   - Relief of pain
   - Maintenance of function

DESCRIPTION

Medication can have significant impact on the person's overall state of health, behavior, and the ability to prevent, combat, or control disease. This part focuses on the information you need to safely and accurately perform the critical tasks of administering medication to an individual. There are two main categories of medication: prescription and non-prescription (over-the-counter). Prescription medication (prescription drugs) include all drugs which must be prescribed by a person licensed to do so by the Department of Licensing and Regulation (e.g., physician, dentist) and dispensed by a pharmacist.

Non-prescription or "over-the-counter" medications (or drugs) include all drugs which do not need to be prescribed by a person licensed to do so by the Department of Licensing and Regulation and dispensed by a pharmacist. A person can buy the drug over the counter in a store and medicate themselves.

All drugs given are considered to be prescription medication. All medications administered must be prescribed by a person licensed to do so by the Department of Licensing and Regulation (i.e., doctor, dentist).

Prescription medications are further divided into sub-categories: controlled and non-controlled.

Controlled Medications (controlled drugs) - These are prescription medications which have been legally designated "controlled substances." Drug control agencies have considered drugs in this category to have a high potential for abuse. Codeine, Dexedrine, Valium, and Librium are some controlled substances. As drugs are identified as having a high potential for abuse they are placed on the Controlled Substance list. There may be special procedures for handling controlled substances.

Non-controlled medications/drugs include all other prescription drugs that do not appear on the list. This does not mean that all drugs not on the controlled list have been tested and found to have no potential for abuse. A drug can be placed on the list or moved from one list to another as findings about the drug are documented.

Drug Abuse refers to using a medication in a manner other than that for which it was intended.

EFFECTS OF DRUG ABUSE:

Physical dependence (addiction)

Psychological dependence (habituation)

Functional impairment

Physical dependence (addiction): Without the drug, the person experiences withdrawal symptoms. When the drug is re-administered, the withdrawal symptoms disappear. For example, a person used to having three cups of coffee each day may have a headache and a tired feeling when caffeine is withheld.

Psychological dependence (habituation) is an emotional dependence upon a drug. The dependence may range from a mild desire for a drug to compulsive use. The person prefers the drug-induced feeling.

Drugs which have beneficial medical effects also have the potential for abuse. These drugs are often abused because they alter one's state of mind. The major categories of drugs that have the potential of drug abuse are:

- Narcotics (heroin, morphine, demerol)
- General central nervous system depressants (barbiturates, alcohol)
- Central nervous system stimulants (cocaine, amphetamines)
- Mind-altering drugs (LSD and marijuana)

Functional impairment is when the body can no longer function normally without the drug. For example, overuse of laxatives will prevent normal movement of the bowels.

Our attitudes regarding the importance of taking medication depends on our culture, community, family, and friends. For most individuals, medications ordered by the physician are acceptable, while street drugs are not acceptable. For instance, some folks will endure a headache all day long rather than take two aspirins. No matter what your personal values are regarding taking medications, you are responsible, as a direct care staff person, to assist the person in using medication as ordered. In addition to the actual administration of medication, the person may need assistance in reporting effects of the medication.

Note: Portions of this content adapted from Bergersen, Betty S. Pharmacology in Nursing, 14th Edition, St Louis: C.V. Mosby Co., 1979.

VI. LEGAL AND ETHICAL IMPLICATIONS OF MEDICATION ADMINISTRATION

LEARNING OBJECTIVES

As a result of reading this material you will be able to:

1. Recognize that laws exist guiding administration of medication.
2. Recognize that all medication must be prescribed by a person licensed to do so by the Department of Licensing and Regulation.
3. Recognize that the direct care staff person is legally responsible for the administration of medication safely.
4. Recognize that any person has the right to refuse medication.

There are laws governing every aspect of drug therapy. The Department of Mental Health (DMH) has issued specific guidelines regarding medications used to decrease some thoughts, feelings and behaviors (psychotropics) and medications used to decrease seizures (anticonvulsants).

All medication including over-the-counter medication must be prescribed by a person licensed to do so by the Department of Licensing and Regulation (i.e., doctor, dentist).

In order to administer medication, there must be a consent signed by the parent or guardian stating that residential community staff may administer medications. Staff must have taken and passed a medication training program approved by your agency. You should only administer medication using procedures for which you have been trained in class. You should refuse to carry out other procedures unless properly trained.

As a direct care staff, you must know the policies and procedures. Most errors in administering medication can be traced to failure to follow these policies and procedures.
Information about each drug must be obtained before administering the medication.

There are many responsibilities which come with administering medications. As a direct care staff, you must convey a positive attitude about medication. Questions asked should be answered honestly and accurately.

Any person has the right to refuse medication. A person should never be forced to take medication. The refusal must be reported and recorded appropriately. Rarely, a decision to force medication is made by the physician, and provisions for this are included in Michigan Mental Health Code.

Never force a person to take medication; he/she has the right to refuse medication.

Safety is the prime concern when administering medications.

This includes strictly adhering to the "five rights," (right person, right medication, right time, right route, right dose). You must observe, record and report person's responses to drug therapy. Every medication is potentially dangerous if not administered properly. If you have any questions about administering medications, be sure to confer with the nurse consultant/pharmacist before proceeding.

VII. DRUG ROUTES, DOSAGE FORMS AND FACTORS THAT INFLUENCE THEIR USE

LEARNING OBJECTIVES

As a result of reading this material, you will be able to:

1. Recognize the difference between "local" and "systemic" effects of drugs.
2. Recognize the differences between therapeutic effects, side effects, adverse effects and contraindications.
3. Identify the major routes of medication administration.
4. Identify your limits in administering medications.
5. Recognize the common dosage forms of medication.

Effects of Drugs

Drugs are administered for their site and systemic (general) effects. Local effects result from directly applying a drug to a tissue or an organ. Only a limited area is affected. Example: the application of an antibiotic ointment to a cut on your arm.

Systemic effects are produced when drugs circulate in the bloodstream and are carried to the cells capable of responding to them. They affect the whole body. Example: an antibiotic taken by mouth for a kidney infection. The drug enters the digestive system, then travels in the bloodstream to all the cells, including those in the kidneys.

Effects of Medication

In order to safely administer drugs, it is important to understand the following:

Therapeutic Effect is obtaining the desired effect of the drug on the body system for which it was prescribed.

Side Effect is any effect of a drug other than for which it was prescribed.

Example: Compazine administered for nausea and vomiting may have a calming side effect.

Adverse Effect is a bad side effect. It may be as minor as a rash or as life- threatening as an allergic reaction.

Contraindication is any reason, symptom or circumstance that would make the use of a drug inadvisable. Examples include:

a. **Pregnancy.** Most medications are contraindicated during pregnancy because they may cause harm to the unborn baby.

b. **Drug allergy.** A drug allergy is an unusual reaction to a drug. This reaction can be immediate or delayed and range from annoying to life threatening.

The effect of a drug may vary from person to person, and even in the same person at different times.

Common Drug Routes and Dosage Forms

Drugs are manufactured in a variety of forms. Each form is intended to be administered by a specific route. The form of the drug and the route determines the amount of drug that reaches the bloodstream or other body system.

The major routes of medication administration include:

1. oral (by mouth)
2. injectable
3 topical (apply directly to tissue or organ; example: eye, ear, nose, skin)
4. rectal
5 vaginal

The oral route is the most convenient and most common route of medication administration. The oral route is the method by which you will be administering most medication.

> Remember: This training program does not qualify you to administer medication by injection or perform other procedures not covered. Additional training and approval by licensed health care provider or his/her designee is required.

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

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

2. Tablets are pressed or molded preparations of powdered drugs. When exposed to liquid, they expand and break apart. The tablet may have a coating.

Don't crush tablets or open any capsules without first consulting a pharmacist.

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

4. Suppositories are drugs for insertion into the vagina or rectum. The suppository will dissolve or melt at body temperature releasing the drug for absorption through the mucus membrane.

5. Elixirs are liquid preparations of drugs.

Occasionally, you will encounter a dosage form that is not covered here and that you are not familiar with. Consult your pharmacist or nurse consultant for safe administration techniques.

VIII. UNDERSTANDING PHARMACY LABELS AND PHYSICIAN ORDERS

LEARNING OBJECTIVES

As a result of reading this material ,you will be able to:

1. Identify the procedures for handling written medication orders.
2. Identify the information required on a pharmacy label.
3. Recognize that only licensed health providers can accept telephone orders for medication.
4. Describe the proper procedures to follow when you are given a telephone order to hold or discontinue a medication.
5. Recognize that direct care staff may receive telephone orders from a physician that are not for medication.
6. Identify the procedure to be followed to receive telephone orders that are not for medication.

WRITTEN MEDICATION ORDERS

In order for the physician to prescribe the best treatment and medication the following types of information should be provided:

1. The person's complete medical records.

2. History of any drug allergies.

3. Current medications being administered and for what purpose.

4. Medical and dental conditions.

5. Written observations of recent physical or behavioral changes.

When the physician decides that a person requires treatment with a medication, the physician writes the prescription to be taken to the pharmacy. A copy of the prescription is necessary for each site where the medication will be given..

The following information about each medication must be obtained before it is given:

1. Purpose of the medication and therapeutic effect.

2. When should the desired effects be expected to occur?

3. Are there any unwanted side effects? What actions should be taken if they occur?

4. Are there any known drug interactions with drugs the person is currently taking?

5. Are there special administration or storage instructions?

NOTE:	**The above information and additional information may be obtained from the pharmacist, nurse consultant, or from a current drug book. IF YOU HAVE DOUBTS, CHECK THEM OUT!!**

TELEPHONE MEDICATION ORDERS

Occasionally in emergency situations a physician may need to give an order for medication without seeing the person. Since only persons licensed to do so can receive telephone orders for medication, the procedure is as follows:

1. Ask the physician to call the medication order in to the pharmacist. (The pharmacist records the order, dispenses the medication and then files the order for future reference.)

2. Carefully document in the person's record:

   a. Time and date of emergency

   b. Detailed description of the emergency

   c. Name of physician contacted and any instructions given

3. Obtain the medication from the pharmacy.

4. Ask the pharmacist for a copy of the prescription for the person's record.

5. After obtaining the medication from the pharmacy, record in the person's record all the information on the prescription pharmacy label.

At times, a physician may forget you are unlicensed and proceed to give you a medication order over the phone or in person. You must remind him/her to call the order to the pharmacist.

HOLDING OR DISCONTINUING MEDICATIONS

You may be instructed by a physician to discontinue or "hold" a medication. You may hold the medication and must contact your nurse.

TELEPHONE ORDERS THAT ARE NOT FOR MEDICATION

Direct care staff may receive orders from a physician over the telephone (except for medication orders), i.e., an order to check vital signs every four hours may be given to you by a physician.

When you receive a telephone order from a physician, that is not for medication, the procedure to follow is:

1. Repeat the order back to the physician for confirmation.
2. Be sure you understand what you are instructed to do. Ask any necessary questions to be sure.
3. Immediately write it down in the person's record. Write down the name of the doctor you talked to, date, time, order (what was said) and your signature.
4. Notify supervisor and nurse consultant.

PRESCRIPTION PHARMACY LABEL

The information from the prescription is put on the pharmacy label by the pharmacist. The pharmacy label contains the important information from the prescription that you must have to correctly and safely give the medication. The pharmacy label should give at least as much information as the prescription gives. The medication container frequently has small or labels attached giving special directions regarding the administration and storage of the medication. An example of these directions might read "take with a full glass of water", or "do not take dairy products, antacids or iron preparations within one hour of this medication".

All containers in which prescription medication is dispensed must bear a label which contains, at a minimum, all the following information:

1. Pharmacy name and address
2. Prescription number
3. Person's name
4. Date the prescription was most recently dispensed
5. Prescriber's name
6. Directions for use
7. The name of the medication
8. Amount dispensed
9. Strength of medication
10. Dosage of medication

Frequently, additional information is also included on the pharmacy label, such as:

1. Pharmacy phone number
2. Refill instructions
3. Initials of pharmacist filling prescription
4. Special instructions for storage/handling

Two or more manufacturing companies may choose to use the same formula and chemicals to make a medication. Both products would have the same generic name. Each company could give the product their own brand name. For example, the generic name of the antibiotic is tetracycline. It is also manufactured under a number of brand names (e.g., Achromycin, Panmycin, Tetracyn and Steclin).

Usually the pharmacist will substitute a generic product for the brand name. In that case, the prescription label should list both names or state "GEQ" (generic equivalent). State of Michigan pharmacists are required to substitute unless "DAW" (dispense as written) is written on the prescription.

The community pharmacist is an excellent person to ask for specific information about the medication prescribed. The pharmacist maintains a list of all (including over-the-counter) medication prescribed for the person. The direct care staff is responsible for updating (informing) the pharmacist on all prescription and over-the-counter drugs the person is currently receiving. This information should be given from the person's record.

IX. STORAGE OF MEDICATIONS

LEARNING OBJECTIVES

After reading this material you will be able to:

1. Recall that all medications shall be stored in the original container from the pharmacy.
2. Recall that medications must be stored in locked compartments under proper temperature control.
3. Identify the procedure to keep the key(s) to the locked medication storage cabinets secure and accessible to the appropriate staff.

PRACTICES TO BE FOLLOWED IN STORING MEDICATIONS -

1. All medications shall be stored in the original containers in which a licensed pharmacist dispensed them.
2. Medications requiring refrigeration are stored in a locked box in the refrigerator.
3. Medication cabinets:
   - Shall not be located over heated areas (heat can change the chemical properties).
   - Shall be used only for medication storage.
   - Shall be kept clean and orderly.
   - Shall have sufficient storage space and adequate lighting.
   - Shall be kept locked except when putting in or taking out medication.
4. All external medication (i.e., ointments, salves, powders, medicated shampoos) should be stored separately from internal medication.
5. **Key(s) to the locked medication storage cabinets must be kept on the person assigned to medication administration on each shift.**

X. MEDICATION PREPARATION, ADMINISTRATION AND DOCUMENTATION

LEARNING OBJECTIVES

As a result of reading this material, you will be able to:

1. Accurately transcribe the information from the pharmacy label to the appropriate forms.
2. Recognize the abbreviations and symbols listed in this reading.
3. List the "Five Rights" of medication preparation and administration.
4. Identify the procedures for the preparation, administration and documentation of oral medication; topical medication; eye, ear and nose instillations; rectal and vaginal suppositories.
5. Recognize the relationship between a pharmacy prescription label and the Medication Administration Record.
6. Identify the procedures for the handling of medications to be administered outside of the home.

Transcribing, Administering, and Documenting Medications

Transcribing

Once you have obtained the necessary medication(s) from the pharmacist you must write down certain information on the appropriate forms. This is known as transcribing. You will be using the information received from the physician and pharmacist for the important transcribing process.

Transcribing is an important part of administering medication safely.

Abbreviations and Symbols

Abbreviations and Symbols

Abbreviations and symbols are shortened forms of words. Some of the common abbreviations and symbols used in transcribing follow:

q. (Q) = Every

d. = Day

h. = Hour

q.3 h. = Every three hours

b.i.d. = Twice a day

t.i.d. = Three times a day

q.i.d. = Four times a day

h.s. (HS) = Hour of sleep **(bedtime)**

p.r.n. = When necessary, or as needed

A.M. = Morning

X = Times

oz. = Ounce

STAT = At once (now)

(o) = Orally

ASA = Aspirin

MOM = Milk of Magnesia

tsp. = Teaspoon

Tbsp. = Tablespoon

gr. = grains

mg. = milligrams

GM, gm. = grams

P.M. = Afternoon

ml = milliliter (same as cubic centimeter)

cc = cubic centimeter

When you return from the pharmacy, you should have:

1. The medication in the container supplied by the pharmacist.
2. A correct and legible (able to read) label on the container.
3. A written physician's order for the medication.
4. Any additional instructions the physician or pharmacist has given you.

You are now ready to transcribe.

Administration

NOTE:	**There must be a written, approved program/treatment plan for persons to be taught to administer their own medications.**

Five Rights of Administration

Each time you administer a medication, you need to be sure to have the:

right person
right medication
right dose
right time
right route

The nursing profession has long referred to these as the "five rights" of medication administration. Each time a medication is given you must systematically and conscientiously check your procedure against these five rights. You must be certain you are administering the right medication, in the right amount, to the right person, at the right time, using the right route.

This procedure is a "must" each time you administer any medication--including those which a person has been taking for a long time and will probably continue to take for a long time. An example might include medications to control seizures or high blood pressure. There is always a possibility that some change has been ordered that you are unaware of, or that you accidentally removed the wrong container.

Right Person

In order to make sure that you have the right person, you have to know the person. If you are not certain that you are administering a medication to the right person, seek assistance from another staff member who knows the identity of the person.

Right Medication

To make sure you administer the right medication, there is a specific procedure to follow:

1. Compare the medication record sheet and the pharmacy label.

2. Triple check them. MAKE SURE THAT THEY AGREE.

3. If they do not agree, immediately consult with the nurse consultant or the pharmacist for clarification.

Right Dose

Be sure you give the right dose by comparing the medication record sheet and the pharmacy label to make sure they agree.

Right Time

When a physician prescribes a medication, he or she will specify how often the medication is to be taken. Some medications must be administered only at very specific times of the day; for instance, before meals, one hour after meals, at bedtime, etc. It is very important that medication be administered as prescribed.

Some medications may be prescribed by the physician using the individual's Standing Medical Order form to be given when specific conditions exist. Medications for headache, constipation and upset stomach are some examples that may fall into this category. There should be specific written instructions from the physician regarding when, and under what conditions the medication should be administered.

Right Route

The pharmacy label should state the route by which the drug should be administered if other than oral. For instance, you might be instructed to externally apply an ointment to a rash. Follow the route directions carefully.

If you have any doubt as to whether the medication is in the correct form as ordered, or can be administered as specified, consult with your nurse consultant or pharmacist before you administer the medication.

Your careful observation of the five medication rights is extremely important to the safety of person. Only <u>if you're sure</u> you have the:

right person

right medication

right dosage

right time

right route

<u>can you administer the medication</u>.

<u>When Not To Give Medications</u>

There may be occasions when it is the appropriate time to administer medications, BUT unusual circumstances require that you do NOT proceed.

1. <u>If any one or more of the following required items are missing</u>:

   - your agency's medication record form
   - legible pharmacy label

   If you do not have, or cannot find either one of these for the medication you are going to administer, <u>STOP</u> ! Contact your supervisor for assistance/direction.

2. <u>Person exhibits a dramatic change in status</u>. If the person is showing signs of seizures, unconsciousness, difficulty breathing or other change which appears to be life threatening, do not administer the medication. Follow the instructions given for reporting an emergency or life-threatening situation.

3. If you have any doubt that you have the right person, right drug, right dosage, right time or right route, get assistance from your supervisor and/or nurse consultant before giving the person the medication.

4. Person refuses to take medication. Explain to the person why it is important to take the medication as prescribed by the physician and encourage the person to cooperate. If the person still refuses, do not force him or her to take the medication. Notify your supervisor and nurse consultant for instructions. Immediately document the incident.

Medication Administration Guidelines

1. Observe the five rights:
   a. right person
   b. right time
   c. right route
   d. right dosage
   e. right medication

2. Work with adequate light.

3. Provide a clean environment for preparing medications.

4. While preparing or administering medications, concentrate on this alone.

5. Be knowledgeable about the medications you give:
   a. why and how it is being given
   b. how soon it should act
   c. possible side effects and adverse reactions, and what to do if they occur

6. Always wash hands before preparing medications and use a clean technique while preparing and administering medications.

7. Administer only medications that you have prepared personally.

8. Give medications as prescribed and on time.

9. Persons with known drug allergies must have charts and medication record labeled with red "allergic" labels.

10. If there is anything unusual about the appearance or smell, do not give the medication until you check with the pharmacist. If the medication must be withheld, the nurse must be notified.

11. Have prescription refilled several days before medication runs out.

12. If you find any discrepancy between the medication record or pharmacy label, consult with the nurse consultant or pharmacist for clarification.

13. If an error is made on the medication sheet, circle it.

14. Only approved abbreviations can be used. Abbreviations should be posted.

15. All pertinent information must be documented! If it is not documented, it didn't happen!

16. Document medications immediately after you pass them.

17. Avoid interruptions or distractions while preparing or administering medications. Be attentive.

18. All medications must be kept in locked compartments under proper temperature control.

19. a. **NEVER** give a person any medication that has not been prescribed by a person licensed to prescribe.

    b. **NEVER** use a medication ordered for one person to treat another.

    c. **NEVER** give a medication to one person from another person's prescription bottle.

    d. **NEVER** pour medication from one bottle to another or relabel bottle.

    e. **NEVER** force a medication.

    f. **NEVER** give a medication without an order.

    g. **NEVER** give out a medication you did not "set up".

    h. **NEVER** change a pharmacy label.

    i. **NEVER** mix medications together unless directed to do so by the prescriber.

    j. **NEVER** return an unused dose of medication to the bottle.

    k. **NEVER** cut an unscored tablet.

    l. **NEVER** leave medication cabinets unlocked or medications unattended.

    m. **NEVER** call medications "candy".

    n. **NEVER** take a telephone medication order from a physician/dentist.

General Procedure for Preparing Medication

1. Check each person's medication record to see if he/she is scheduled to receive medication on your shift.

2. Select medication record according to time and day medications are to be given.

3. If you are unfamiliar with a medication you are giving check with the nurse consultant/pharmacist/current drug book.

4. Clean off work area.

5. Wash hands.

6. Compare label of the medication container with the medication record three (3) times to ensure accuracy as follows:

    a. Before the container is taken from the storage area
    b. Before the medication is removed from the container
    c. Before the container is returned to the storage area (if using topicals or eye/ear drops, make third check before administering)

7. Prepare the right medication in the right dosage at the right time by the right route for the right person.

8. Follow special instructions written on label or attached to container (i.e., shake, warm, do not take with milk).

9. If using a bottle of medication, pour capsule, tablets, or pills into the lid. From lid, pour into medicine cup.

10. Pour liquids from the unlabeled side of bottle, wipe off excess medication with a paper towel.

11. Measure liquid medication in measuring spoons or measuring glass/cup.

12. Pour liquid medication at eye level.

13. Prepare one person's medications at a time.

General Procedure for Administering Medication

1. Positively identify person prior to administration of medication.

2. Do not "force" a person to take medication.

3. Explain to the person why the physician ordered the medication (even if person is non-verbal) and what the procedure will be. It is important that someone understand why they must take medicine.

4. Provide privacy if appropriate.

5. Assist person in taking his/her medication.

   - Positioning the head correctly will aid in the swallowing process.

   - Give adequate water to aid in swallowing tablets, capsules or liquids.

   - If a person has difficulties swallowing the tablet, capsule or liquid, notify the nurse consultant.

6. Remain with the person until he/she swallows the medication.

7. Some medication is not to be swallowed (i.e., lozenges, nitroglycerin).

8. Administer only medication that you prepare.

9. Observe, record, and report person's response to the medication.

Procedure for Administration of Topical Medications

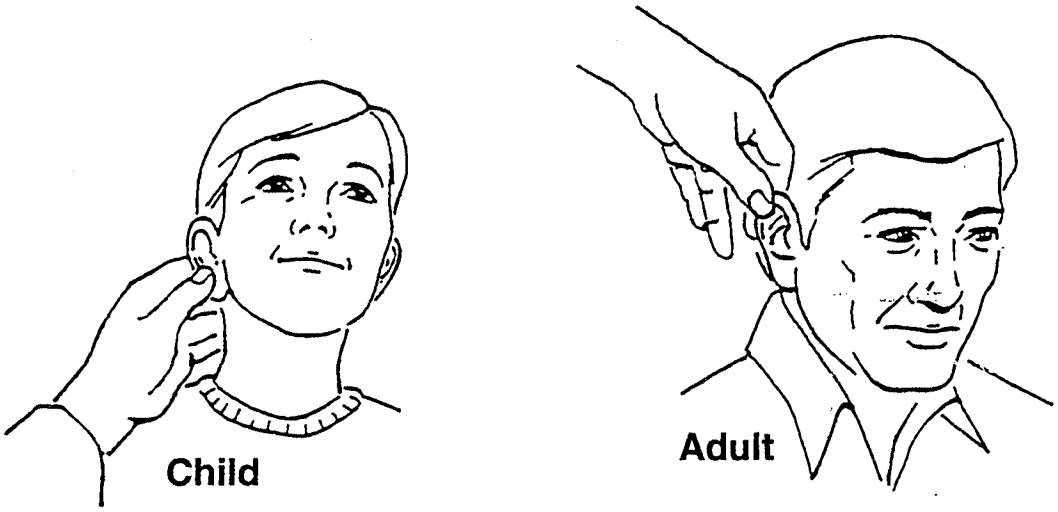
1. **Wash hands.**
2. Remove medication from jars with tongue blade or cotton tipped applicators. DO NOT USE YOUR FINGERS.
3. Insert applicator or tongue blade into container only once, NEVER RE-INSERT.
4. Use cotton tipped applicators, sterile gauze, or gloved hand to apply topical medications unless otherwise directed.
5. **Wash hands.**

Procedure for Administration of Nose Drops

1. **Wash hands.**
2. Check the dropper tip for chips or cracks.
3. Have person blow nose gently.
4. Have the person tip their head back while either sitting or lying flat.
5. Draw the medicine into the dropper.
6. Avoid touching the dropper against the nose or anything else.
7. Replace dropper and secure.
8. Encourage person to remain with head tilted back for 3-5 minutes. Provide tissue for nasal drainage.
9. **Wash hands.**

Procedure for Administration of Ear Drops

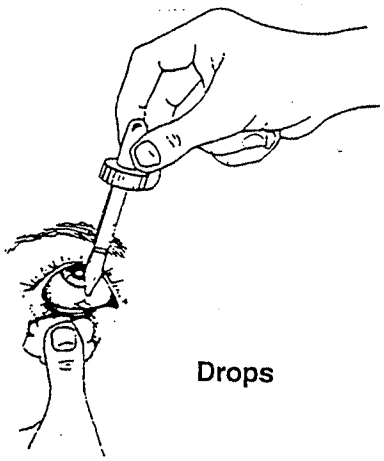
1. **Wash hands.**
2. Check the dropper tip for chips or cracks.
3. If the drops are a cloudy suspension, shake well for ten seconds.
4. Position the person with affected ear up.
5. Draw the medicine into the dropper.
6. Avoid touching the dropper against the ear or anything else to reduce chance of contamination or ear injury.
7. To allow the drops to run in straighten the canal on an adult by pulling the ear up and back.
8. Replace dropper and secure.
9. Keep the ear tilted up for 3-5 minutes.
10. Wash hands.



Straightening the ear canal in preparation for ear drops.

Procedure for Administration of Eye Drops

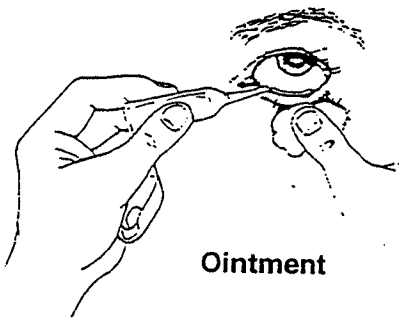
1. **Wash hands.**
2. Check the dropper tip for chips or cracks.
3. Have person lie down or tilt head back.
4. With your index finger, pull the lower lid of the eye down to form a pocket.
5. Draw the medicine into the dropper.
6. Hold the dispenser with the opposite hand and place as close to the eye as possible, without touching it.
7. Hold the dropper tip down all the time. This prevents the drops from flowing back into the bulb where they may become contaminated.
8. Brace hand on forehead.
9. Drop the prescribed amount into the pocket made by the lower lid.
10. Avoid touching the eye with the dropper or anything else.
11. Replace dropper and secure.
12. Caution the person not to rub their eyes. Wipe off any excess liquid with a tissue.
13. **Wash hands.**



Drops

Procedure for Administration of Eye Ointment

1. **Wash hands.**
2. Tilt head back.
3. Hold the tube between your thumb and forefinger and place the tube as near to the eyelid as possible, without touching it.
4. Avoid touching the top of the tube against the eye or anything else.
5. With your finger of the other hand, pull the lower lid of the eye down to form a pocket.
6. Place the ointment into the pocket made by the lower lid.
7. Have person blink eye gently.
8. With a tissue, wipe off any excess ointment.
9. **Wash hands.**

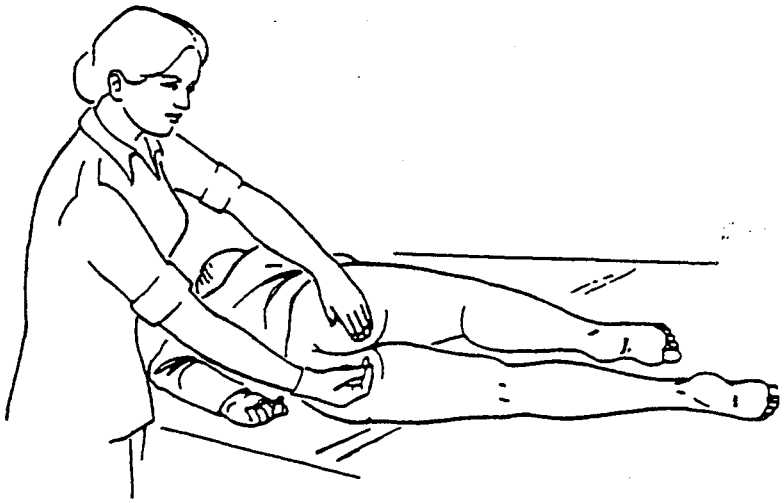


Ointment

Note: Vision may be blurred for a few minutes after installation of ointment.

Procedure for Administration of Rectal Suppositories

1. Wash hands.
2. Remove suppository from storage (Store suppositories in a cool place to avoid melting. Refrigerate them if so labeled.)
3. Explain to the person why the physician ordered the medication and the procedure.
4. Provide privacy.
5. Have person remove undergarments and lie on left side with lower leg straightened out and upper leg bent forward toward the stomach. Cover exposed area with towel or sheet. Do not give in sitting position.
6. Remove wrapper if present.
7. Put on a disposable glove. Lubricate suppository, finger and rectal opening with water soluble lubricant (e.g. K-Y Jelly).
8. Lift upper buttock to expose rectal area. Encourage person to take several deep breaths to help relax.
9. Insert suppository with finger until it passes the muscular sphincter of the rectum, about 1/2 to 1 inch in infants and 1 inch in adults. If not inserted past this sphincter, the suppository may pop back out.
10. Hold buttocks together for a few seconds.
11. Have person remain lying down for about 15 minutes to avoid having the suppository come back out.
12. Remove gloves and wash hands.



Procedure for the Administration of Vaginal Suppository

1. **Wash hands** and remove suppository from storage (Store suppositories in a cool place to avoid melting. Refrigerate them if so labeled.)
2. Explain to the person why the physician ordered the medication and the procedure.
3. Select a private location with adequate lighting.
4. Have person lie on back with knees bent.
5. Remove the wrapper if present.
6. Put on disposable gloves.
7. Identify vaginal opening.
8. Insert medication approximately two inches into vaginal canal, following the instructions on the pharmacy label.
9. Ask person to remain lying down for 15 minutes.
10. Remove gloves and wash hands.

General Procedure for Documenting Medication Administration

1. Observe the rules of general documentation (i.e., write in ink, never erase or use white-out)

2. All forms must have the name of the person receiving the medicine on them. Medicines must be used only for the people they are prescribed for.

3. All medication administered, prescription and over-the-counter, must be documented.

4. Medications must be documented by the person administering them.

Record immediately after administering the medication, not before.

Procedure for Documenting Medication Administration on the Medication Record.

1. The first time you document the administration of a medication on the medication record, sign your name, title and initials once at the bottom of the page.

2. Any codes used must be explained at the bottom of the medication record. (e.g., LOA for leave of absence.)

3. Stat and single dose medications must be recorded on medication record.

Documenting Effects of Medications

Physical and behavioral changes that are due to the effect of a medication are often difficult to sort out from those that are not due to medication. There may be many different reasons for the same sign or symptom. A change in behavior may be due to a medication change or a change in the person's environment. A sore throat may be one of the first symptoms of a cold or may be an adverse effect of a medication.

Interpretation (deciding the meaning) of a sign or symptom is the responsibility of a physician. Your responsibility is to consistently and accurately observe, report and record any change in physical conditions or behavior. It is also your responsibility to give the appropriate care to the person in the meantime if it is an emergency or potentially health-threatening condition.

Procedure for Administration of Medication for School, Day Program or Leave of Absence

If the person will be taking medication at more than one location (for example, in the home, at work or school or day program) follow these procedures:

1. Explain to the pharmacist that the person will be taking the medication in two different locations. The person will need two pharmacy-labeled containers, one for each location. Be prepared to give the pharmacist the information needed for putting the correct dosage in each container. (The number of days per week or month that a person would need the medication at a job setting, for example.) Ask the pharmacist to type SCHOOL, WORKSHOP, or DAY PROGRAM on the container.
2. Hand deliver the medication containers to the appropriate facilities along with a copy of the physician's order.
3. Share any information that the physician, pharmacist, or nurse consultant has given you about the medication and potential response of the person.

Be sure that:

1. **You do not dispense medication, that is, transfer medication from the medication container to another container for someone else to administer it. PHARMACISTS DISPENSE MEDICATIONS.**
2. **Consumers are not to transport medication to school/day program unless it has been approved by the interdisciplinary team and written in the program/treatment plan.**
3. **Register the correct code on the medical record.**

If the person takes a leave of absence, the pharmacist should dispense medications to be given while on leave. If this is not possible, all medication must be sent in the original pharmacy container. Be sure to share any information with the family/guardian that the physician/pharmacist/nurse consultant has given about the medication and potential response of the person. When the person returns, ask the family or guardian whether the medication was administered and the response of the person.

Register the correct code on the medication record when the person is to receive that medication on a leave of absence.

XI. MEDICATION ERRORS

LEARNING OBJECTIVES

▸ **As a result of reading this material, you will be able to:**

1. **Recognize that every medication error is potentially serious and must be reported immediately.**

2. **Recognize when a medication error occurs.**

3. **Identify ways to prevent medication errors.**

4. **Recall the procedure to follow if a medication error occurs.**

▸ A medication error has occurred when:

1. The wrong person was given a medication.

2. The wrong medication was given to a person.

3. The wrong dosage was given to a person.

4. A medication was administered at the wrong time to a person or a medication was not administered at all.

5. A medication was administered by the wrong route.

Every medication error is potentially serious and could be life-threatening. The error should be reported immediately.

Ways to prevent errors include:

1. Stay alert, and always observe the "Five Rights" of medication administration.
2. Avoid distractions when preparing, administering, and documenting medication.
3. Be knowledgeable about the medications you administer.
4. Ask for help from your licensed health providers if you are unsure about any step in preparing, administering, and documenting medications.

If an error does occur, it must be reported immediately, and necessary action taken. The error must be recorded and your agency's policies followed.

XII. DISCONTINUATION AND DISPOSAL OF MEDICATION

LEARNING OBJECTIVES

- As a result of reading this material you will be able to:

1. Identify the procedure for proper disposal (getting rid of) of medication.
2. Recall that you should never dispose of medication where humans or animals might gain access.
3. Identify the procedure for discontinuation of an order for medication.

There are several acceptable ways to dispose of medications. It is your responsibility to inform yourself of the method used at your work site.

1. Medications should be returned to the pharmacy when the pharmacy agrees to accept them. In this case, medication to be disposed of is segregated and kept locked in a box clearly marked for disposal. Staff will follow the written policy for documenting medication that is collected for return to the pharmacy.

2. Medications may be disposed of by the nurse consultant and a witness when the contracting pharmacy will not accept the medication. In this case, the medication is segregated and held until the next consultant home visit. It is kept locked in a box clearly marked for disposal. Staff need to follow the written policy for documenting medication that is disposed of.

3. Medications may be disposed of by two staff, with one acting as a witness.

Procedures to follow when contaminated medication, deteriorated medication and medication whose shelf life has expired needs to be disposed of are:

a. Two direct care staff, one acting as a witness, should destroy the medication beyond possible reclamation as outlined in the procedure for discontinued medications.

b. Documentation of the disposal of the medication should be done on the person's record/log/journal.

c. Other staff should be made aware of the disposal of the medications.

d. The nurse consultant should be contacted for instructions regarding replacement.

If a medication is prescribed for a specific number of days or doses, the medication is administered until all the medication is gone. However, if the physician decides to increase, decrease, or discontinue the medication before it has all been taken, the remaining medication must be discarded in a safe and thorough manner, or returned to the pharmacy. A new prescription must be written by the physician.

<u>When a medication is discontinued certain procedures must be followed:</u>

1. A physician's order authorizing discontinuation should be on file in the person's record.

2. Two direct care staff, one acting as a witness, should:

   a. Compare the pharmacy label with the physician's order to make sure the right medication is being discarded.

   b. Destroy the medication beyond possible reclamation.

NOTE: Your agency may require that an Incident Report or Medication Disposal Form be completed.

3. Document the disposal of the medication on the person's record/journal/log, including both person's signatures.

4. Write discontinued or D/C in bold letters on the medication record starting where the next dose would have been recorded.

5. Make other staff aware of the discontinuation of the medication.

Never dispose of medications where humans or animals have access.

XIII. RESOURCES

1. MDMH, (1984). *Group Home Curriculum*, Module 3, and Module 11.

2. Springhouse Corp., *Illustrated Manual of Nursing Practice*, 1111 Bethlehem Pike, Springhouse, Pennsylvania, 19477.

3. C.V. Mosby Company, (1989). *Mosby's Manual of Clinical Nursing*, Second Edition.

4. Intermed Communications, Inc., Nurse's Reference Library, *Definitions*, Nursing 83 Books, 1111 Bethlehem Pike, Springhouse, Pennsylvania, 19477.

5. Intermed Communications, Inc., Nurse's Reference Library, *Diseases*, Nursing 81 Books, 132 Welsh Road, Horsham, Pennsylvania, 19044.

6. Springhouse Corp., Nurse's Reference Library, *Patient Teaching*, Nursing 87 Books, 1111 Bethlehem Pike, Springhouse, Pennsylvania, 19477.

7. Stonehouse, Dr. Bernard, (1985). *The Way Your Body Works*, New York: Bonanza Books.