HEALTH ESSENTIALS

Tracking Medication, Patient Care Records, Vital Signs, and Infection Control
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Infection Control in Your Home

How to Minimize the Spread of Germs and Infection

It's something that we all know. Germs and bacteria are everywhere. If you looked on your body, clothes, and everyday household items and appliances with a microscope, it would scare you stiff. Now I'm not saying at all that we should walk around wearing masks and gloves, but a few simple lifestyle changes can greatly reduce the spread of germs and bacteria. Many of them may seem common sense, but many of them we don't think about at all when we should.

Your Body

Daily bathing is essential. Don't just assume that as long as you're not stinking, you don't need to bathe. Take showers, not baths. As warm and soothing as a bath is, you are literally lying in your own filth. If you truly desire a bath, take a shower first to get your body clean. That will minimize the muck that will be left in the water during a bath. A clean body promotes infection control.

Your Clothes

Wear clean and dry clothes. A clean body means nothing if your clothes are ridden with bacteria and germs. Clean and fresh clothes promote infection control.

Your Home

Two rooms in particular are your bathroom and kitchen surfaces. The bathroom for sanitary reasons, and the kitchen simply because that is where you are preparing

food for consumption. Use bleach-based toilet, bathroom, and kitchen cleaners. Bleach kills bacteria! Get rid of any wood cutting boards you may have in your kitchen. You can scrub them, but they will still have bacteria embedded in them. A synthetic vinyl or plastic one is easier to clean and it will not just look clean, it will be clean.

Household Surfaces

Sure this is part of your home but it's very important. I'm sure you clean your kitchen table, coffee table, and nightstands, but what about your computer keyboard, doorknobs, the toilet flush handle, the television remote, or the microwave control panel? These are commonly touched things in your house. Some of them are touched more than others or are touched by far more different people than others, but they all contain germs, and some of them you've likely seldom or never cleaned before. Clean those surfaces with a bleach-based cleaner and/or spray them with Lysol. Lysol kills bacteria too and promotes infection control.

Hand washing

Wash your hands! Wash your hands! Wash your hands! I can't say it enough. The number one cause of the spread of bacteria and other germs is lack of frequent and/or proper hand washing. How long should I wash my hands? A good exercise in determining the proper time element is to sing a verse of the song "Twinkle, Twinkle, Little Star." In the health-care profession, workers are trained to wash their hands before and after assisting each patient. It is said that if a busy CNA or nurse's hands and fingertips should look pruned like they just got out of the pool or washed the dishes. Good and frequent hand washing promotes infection control.

INFECTION CONTROL

The spread of germs and bacteria is inevitable. You can't avoid it, but following these simple rules and making these changes can make a considerable impact on you and your family's health and enable you to help reduce the spread of germs and bacteria.

MEDICATION

Medication

Your patient may be taking medicine that has been prescribed by a health care provider as well as over-the-counter (OTC) medicines that you can buy without a prescription. Over-the-counter medicines can include vitamins, laxatives, cold medicines, and antacids. Both prescription and OTC medicines can cause serious problems. Be very careful to give medications exactly the way the health care provider advises. To be safe, do not mix medications together without first checking with the health care provider. And know when to give medications—before or after eating.

You and your patient should learn about the medicines they take and there possible side effects.

Ask Questions

What is the medicine's name?
Is there a generic available?
Why is the patient taking this medicine?
Should the patient take this medicine on an empty stomach or with food?
If the patient forgets to take one dose of the medicine, what should I do?
How much should they take?
How long should they take it?
What problems should I watch for?

Dos and Don'ts of Medicine

Dos

DO give medicine to your patient in the exact amount and on the same schedule prescribed by the health care provider.

MEDICATION

DO always ask the health care provider about the right way to take any medicine before the patient starts to use it.

DO keep a daily record of all the medicines your patient takes. Include prescription and over-the-counter drugs. Note the name of each drug, the health care provider who prescribed it, the amount taken, and the times of day it is taken. Keep a copy in your medical records.

DO review your patient's records with the health care provider at every visit and whenever the health care provider prescribes new medicine. Health care providers often get new information about medicines that may be important to the patient's health.

DO make sure you can read and understand the drug name and the directions on the container. If the label is hard to read, then ask you pharmacist to use larger type.

DO check the expiration dates in the medicine containers. Throw the medicine away if it has passed the date.

DO call the health care provider right away if the patient has any problems with the medicine.

DO make sure that the health care provider knows all of the medicines—both prescription and over-the-counter—that the patient is taking before advising the patient to either stop taking a medicine or to start taking a new one.

DO read all pamphlets upon receiving any medications.

Don'ts

DON'T have the patient stop taking a prescription medicine unless the health care provider says it is okay—even if your patient is feeling better.

DON'T give the patient more or less than the prescribed amount of any medicine.

DON'T crush or chew tablets or pills unless instructed to do so by the health care provider or pharmacist.

MEDICATION

DON'T give the patient medicine prescribed for another person.

DON'T give any medicine to the patient without the health care provider's approval.

Giving Medicine

Read the label and pamphlets before taking any medicine. The label should show the following:

List of ingredients: If you know that the patient is allergic to anything in the medicine, then do not use it. Ask the health care provider or pharmacist for a different medicine.
Warnings: Read these carefully.
The expiration date: Do not use a medicine after the date on the container.

Avoid problems. Medicines can cause problems or side effects. Some side effects may include sleepiness, vomiting, bleeding, headaches, or rashes. Ask about the side effects of the medicines the patient is taking. Talk with the health care provider, pharmacist, or nurse.

Keep a record of all medicines the patient is taking. Use the chart on the following page to keep a daily record of medicines the patient is takes.

Use a daily or weekly medicine container (available at most drugstores) to help the patient remember to take each dose of medicine.

MEDICATION

MEDICATION ADMINISTRATION – MUST BE DONE BY A FAMIY MEMBER, LICENSED HEALTH CARE PROVIDER OR NURSE. CAREGIVERS CAN ONLY ASSIST WITH MEDICATIONS ALREADY PREPARED BY THE FAMILY MEMBER, HEALTH CARE PROVIDER OR NURSE. HOWEVER, A NURSE MAY BE REQUIRED IF THE PERSON RECEIVING CARE IS UNABLE TO TAKE THEIR MEDICATION WITH ASSISTANCE.

Tablets and Capsules

When giving tablets or capsules to the patient:

Make sure the patient is sitting up in a comfortable position.
Give only one tablet or capsule at a time.
Place the tablet or capsule in the patient's hand.
Give them a drink of water to help the tablet or capsule slide down their throat easier.
If the patient has trouble swallowing, try putting the tablet or capsule in a spoonful of food such as applesauce, or any other soft food.
Make sure that they swallow the medication.
Always check the name of the medication before using it. Do not depend on color or size of the tablets or capsules. Different generics of the same medicine may come in different color or sizes.

MEDICATION

Liquid medicine

To give liquid medicines to the patient:

Shake the bottle well if directed to do so.
Measure the appropriate dose into a medicine cup.
Put the medicine cup up to the patient's hand and allow them to take the medicine.
Store liquid medicines properly. Some medicine needs to be refrigerated.
Check with the health care provider before using a generic liquid medicine as a substitute for a prescribed brand medicine.

Drops and Ointments Eye

Drops

To give eye medicine to the patient:

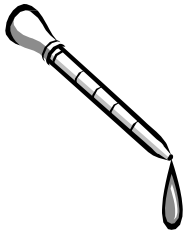
MEDICATION

Wash your hands first.
Have the patient sit or lie down comfortably with their head tilted back.
Always know which eye will be getting the medication.
Stand alongside them. Using a soft cloth, gently pull down on lower eyelid.
Put the prescribed amount of drops into the eye.
After you put in the drops, hold the lower lid down for a few seconds to let the drops settle. Then let go so that the lid touches the eye. The treated eye should be closed slowly, without blinking.
Have the patient close their eyes to help distribute the medicine.

Ear drops

To give ear drops to the patient:

Have the patient lay on their side with the ear that needs the medication facing upward.
Open the ear by gently pulling the flap of the ear up and back.
Put in the prescribed number of drops.
Have the patient stay on their side for about 20 minutes to make sure the medicine gets to the ear canal.
You will usually see a bubble rise if the medication has gone into the ear canal successfully.



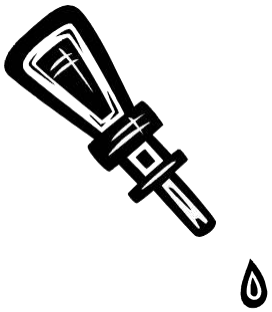
MEDICATION

Nose Drops

To give nose drops to the patient:

Have the patient sit or lie down in a comfortable position with their head tilted back.
Place the tip of the dropper about 1/3 inch into the patient's nostril.

Squeeze the dropper or bottle to administer the prescribed amount of drops while the patient breathes in the medicine.



MEDICATION

Medication Record Sheet

Patient Name:_____**Phone#:** _____

Address:_____

Date	Medication	Dose	How Given	CG Initials

Allergies:_____

Pharmacy name, address, and phone #:_____

_____

_____

PATIENT CARE RECORDS

The Patient's Care Record

Every patient has a care record. This is a permanent written record containing confidential information that serves many purposes:

To document the work done and the quality of care
Progress according to the care plan
For communication between caregivers
As a basis for evaluating the plan of care and changing the plan accordingly
To recall information at a later time, or if the patient is discharged and then readmitted to agency services
As a record for billing to obtain reimbursement for services from care provider.

Recording the Patient's Record

Documentation

Remember, the patient's record is a legal document that may be used as evidence in court. Therefore, it is important that your charting is accurate. Record what you did and what you observed. Do not record what you thought, guessed, or how you personally felt about your work or observations. Be sure to follow the basic rules for recording listed below:

Always record the correct date and time.
Always use ink.
Write legibly or print entry.
Record all phone calls.
Document patient's response to care.
Record all daily events.

PATIENT CARE RECORDS

Be concise.
No personal comments or slang
Use correct spelling and proper English.
Use correct abbreviations and medical terminology.
Sign your full name with a da

BEDSIDE NOTE

Fill in the date, time, and daily event. (Do not put any personal comments.)

Signature_____

Date_____

Observing the Patient

When you observe the patient, you will be using your senses to gather information on the patient's condition.

There are three types of observations; they are *objective*, *subjective*, and vital signs.

OBJECTIVE

The method of observation means that the person is using one or more body senses to gather information.

Sight—seeing bruises, cuts, or any marks on the patient's body
Sound—hearing two family members argue about financial problems or any other irregular sounds
Smell—smelling the odor of spoiled food in the refrigerator
Touch—touching the patient's reddened skin

SUBJECTIVE

This means that someone tells you information that you cannot observe. For example, your patient says that they have a dull pain in the right shoulder and is dizzy. Or a family member tells you that the patient has been very depressed.

VITAL SIGNS

Are there measurable signs of bodily function, such as temperature, pulse, respirations, and blood pressure?

You will use all three methods of gathering information. For patients who are elderly, infants, children, and others who are not able to tell you about their symptoms, your powers of observation are especially important. Developing your observation skills takes time and practice.

Guidelines for Head-to-Toe Observation

I. OVERALL APPEARANCE

A. Consciousness

Alert
Confused
Does not react
Drowsy
Slow to react
Listless

B. Grooming

Clean
Dirty
Untidy

C. Skin

Pale
Yellow
Clammy
Dry
Rough

Red
Bruises
Rashes
Open sores
Scaly patches

D. Mood

Cheerful
Withdrawn
Anxious
Sullen
Hostile
Demanding
Agitated
Irritable
Angry
Sad

II. HEAD TO TOE

A. Head and Neck

1. Hair and Scalp

Clean
Matted
Oily
Dandruff
Dirty
Dry Sores

2. Eyes

Bright
Red
Sensitive to light
Sees well
Dull
Glassy
Discharge
Sees poorly
Blind

3. Ears

Discharge
Pain
Hears well
Difficulty hearing
Deaf

4. Nose

Dry
Discharge
Bleeding
Stopped up

5. Mouth

Odor
Bluish or pale Discharge
Sores

Difficulty chewing
Condition of Difficulty swallowing
teeth/dentures
Gums—red, bleeding

6. Speech

Normal for individual
Slurred
Unable to speak
Difficulty talking

7. Breath

Slow
Noisy
Coughing
Painful
Rapid
Difficulty breathing

8. Neck

Swelling
Difficulty swallowing
Pain

B. Arms, Wrists, Hands, and Fingers

Bruises
Cuts
Rash
Swelling

Cold
Pale or bluish fingernails

Movement

Easy
Painful
Twitching
No movement—one side or both sides
Difficult
Painful
Shaking
Twitching
Strength
Difficulty holding objects
Weakness—general or one side
Loss of strength

Feeling

Numbness
Tingling sensation
Pain

C. Chest and Abdomen

Bruises
Cuts
Rashes
Swelling
Pain

Breasts

Lumps
Discharge from nipple
Irritation of skin under
Pain breast

D. Pubic Area

Bruises
Cuts
Swelling
Rashes
Pain
Lumps

1. Female

Vaginal Discharge

Odor
Color
Swelling in groin area

Menstruation

Odor
Large amount
Pain
Blood clots

2. Male

Penis and scrotum

Discharge
Odor
Swelling
Lumps
Pain
Swelling in groin

E. Legs, Ankles, Feet, and Toes

Bruises
Cuts
Rashes
Swelling
Pain
Bluish toenails
Sores

Movement

Easy
Difficult
Painful
Shaking
Twitching
No movement

Strength

Weakness
Loss of strength

Feeling

Numbness
Tingling
Pain

F. Upper and Lower Back and Buttocks

Bruises
Sores
Scaly patch
Dry skin
Redness
Pain
Swelling

III. Other

A. Activities of Daily Living

Performs ADL

without assistance
with assistance
cannot perform

Personal Care:

bathing
hair care
brushing teeth
shaving

Toileting:

toilet
commode
Urinal and bedpan

Moving:

sitting
standing
walking

B. Appetite

Fluids
Thirsty
Foods
Drinks
Eats
Poor

C. Elimination

1. Urine

Pale or red
Dark amber
Odor
Large amount
Small amount
Painful urination
Difficulty urinating
Frequent urination
Incontinence

2. Feces

Black, tarry
Bloody
Clay colored
Watery
Diarrhea
Odor
Difficulty moving bowels
Painful movements
Frequent movements
Incontinence

D. Equipment Needed by the Patient

Wheelchair
Walker
Oxygen
Catheter
Commode
Cane
Hospital bed

E. Pain

Dull
Aching
Stabbing
Severe
Comes and goes
Location

VITAL SIGNS

Vital Sign

Records

Patient Name:_____Phone#: _____

Address:

Date	Temperature	Pulse	Respiration	Blood Pressure	Blood Sugar	Weight

VITAL SIGNS

Definition of Vital Signs

1. Temperature	The amount of heat produced by the body as it uses food for energy.
2. Fever	An abnormal elevation of body temperature.
3. Thermometer	An instrument for measuring temperature.
4. Pulse	Throbbing felt over the arteries with each beat of the heart.
5. Respiration(s)	Act or process of breathing.
6. Blood Pressure	The pressure of blood within the arteries and veins.
7. Vital Signs	Essential signs of life: temperature, pulse, respirations, and

Circulatory/Respiratory System Review

The heart is a muscular organ that pumps blood through the arteries to all parts of the body.
The heartbeat has two parts: Systolic (blood) pressure—The force of blood pushing against the walls of the large arteries when the heart muscle is contracting Diastolic (blood) pressure—The force of blood pushing against the walls of the large arteries when the heart muscle is resting Hypertension—high blood pressure Hypotension—low blood pressure
The act of breathing has two parts: Inhaling—when oxygen is taken into the body. Exhaling—when carbon dioxide is expelled from the body.
The heart and lungs are located in the chest cavity.

Vital Signs: Normal Adult Ranges

Oral	97.6-99.6°F	36.5-37.5°C
Rectal	98.6-100.6°F	37.0-38.1°C
Axillary	96.6-98.6°F	36.0-37°C

VITAL SIGNS

Pulse Rate

60-100 beats per minute

Respiratory Rate

12-20 respirations per minute

Blood Pressure

Systolic 100-140
Diastolic 70-90

Vital Signs

The caregiver must learn to measure temperature, pulse, respirations, and blood pressure. Vital signs are taken and recorded.

Take the vital signs while the patient is resting. Exercise and activity can cause the vital signs to increase. Other factors that influence vital signs are sleep, age, anxiety, fear, illness, pain, food, fluids, and medications.

Temperature

Normally, the amount of heat produced should be the same as the amount of heat lost from the body. Heat leaves the body through urine, feces, exhaling, and skin surface. When heat produced by the body is not removed through normal means, it builds up in the body. This increase in body temperature is called a fever.

Measuring body temperature is an important way to observe the patient's response to illness and treatment. Pulse and respirations are usually measured at the same time the temperature is taken.

Some factors may change the reading of the body temperature for a short time. These include the following:

Drinking hot or cold liquids
Eating hot or cold foods
Smoking
Taking a hot or cold bath or shower
Exercising

If your patient has participated in any of these activities, wait 15 minutes before taking the temperature.

There is a vast difference in normal temperature from person to person. Some older adults may have a very low normal temperature. It is important to know what is normal for each person. This is part of the information collected by the caregiver during the first visit to the patient.

Location

Temperature may be taken in several areas of the body:

Oral temperature (mouth)
Axillary temperature (armpit)
Rectal temperature (rectum)
Tympanic temperature (ear canal)
Forehead

Thermometer

The thermometer is an instrument used to take the temperature. There are several different kinds of thermometers: oral, rectal, electronic, tympanic, disposable, and

forehead. They may be made of glass, plastic, or paper. The patient should have his or her own personal thermometer, not one shared with others.

Reading a Thermometer

A glass thermometer—note the bulb is the tip, the mercury the center, and the stem is the outer glass.

The glass thermometer has three important parts:

1.	Bulb or tip—there the mercury is stored
2.	Mercury
3.	Stem or tube that contains the scale for reading the temperature

The heat of the body causes the mercury to expand and rise in the stem. Long lines on the tube mark 94 to 108°F. Short lines indicate two-tenths of a degree. An arrow marks the normal adult oral temperature of 98.6°F.

READ THE THERMOMETER IN THE FOLLOWING MANNER:

1. Hold the thermometer at eye level, handling only the end of the stem.
2. Find the column of mercury. Turn the thermometer slowly until you see a silvery line along the scale.

Fahrenheit Thermometer:

a.	Find the mark to indicate 94°F. Each long line marks one degree of temperature.
b.	Only every other degree is labeled with a number—94°F, 96°F, 98°F, etc.

c.	Between each long line, there are four short lines. Each represents two-tenths of one degree (2/10 or 0.2).

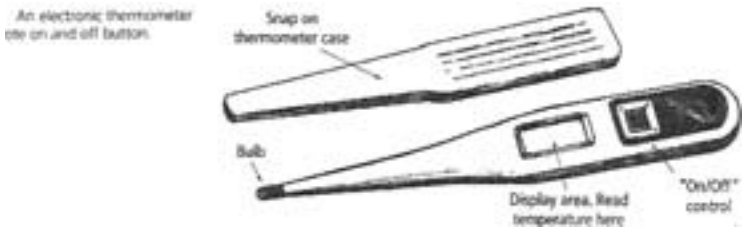
Celsius (Centigrade) Thermometer:

a.	Find the mark to indicate 35°C.
b.	Each long line marks one degree of temperature.
c.	Each degree is marked with a number—35°C, 36°C, etc.
d.	Between each long line, there are nine short lines. Each line represents one-tenth of one degree (1/10 or 0.1).

3. Read the temperature at the point where the mercury ends.

Electric Thermometers

Electric thermometers give a digital number reading of the results. If the battery is working, you should see the results in the readout area. The letter F after the numbers indicates the Fahrenheit scale of measurement, and the letter C indicates Celsius.



Cleaning a Thermometer

Thermometers are cleaned before and after each use. Handle the thermometer by its stem only. For both glass and home-use electronic thermometers, follow the procedure below.

VITAL SIGNS

Shaking Down a Glass Thermometer

The mercury in a glass thermometer will not go back into the bulb unless you shake it down. In order to get an accurate reading, shake the mercury down to 95°F or 35°C.

Grasp thermometer firmly by the stem end with thumb and two fingers.
Stand away from areas where you might hit the thermometer and break it.
Shake thermometer with a movement that snaps the wrist, as in a vigorous shaking to remove water from the hands.
Shake over bed or sofa if there is danger of dropping the thermometer.

Cleaning a Thermometer (Glass or Oral Electronic)

Materials Needed

Thermometer
Cotton balls or tissues
Soap and cold water

Procedure

1.	Wash your hands.
2.	Obtain materials listed above.
3.	Wet cotton ball or tissue with soap and water.
4.	Hold thermometer by the stem over a sink or wastebasket.
5.	Begin at stem end. Wash from stem to bulb end, twisting cotton ball firmly.
6.	Discard used cotton ball or tissue.
7.	Rinse thermometer with a clean, wet cotton ball using the same twisting, downward movement.
8.	Repeat washing and rinsing.
9.	Dry with a tissue, wiping in same downward movement.
10.	Discard tissue.
11.	Take patient's temperature or store thermometer properly.

Taking an Oral Temperature

The usual way to take the temperature by mouth is the glass thermometer. The glass thermometer is left in the mouth for three minutes. Electronic thermometers signal with beeping sounds when the reading is complete.

For certain patients, taking an oral temperature is not recommended. These include the following:

Unconscious, restless, or confused patients
Mouth breathers
Those receiving oxygen
Paralyzed patients
Those with sore mouths
Infants and young children

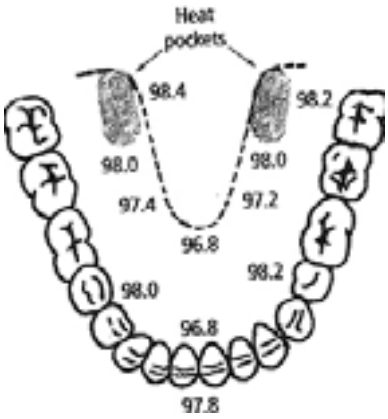
Taking an Oral Temperature with a Glass Thermometer

Materials Needed

Glass oral thermometer
Tissues or cotton balls
Watch with sweep-second hand
Pencil and paper

Procedure

1.	Explain what you are going to do. (Remind patient not to eat, drink, or smoke for 15 minutes.)
2.	Have patient lie down or rest in a chair.

3.	Wash your hands.
4.	Obtain materials listed above.
5.	Clean thermometer.
6.	Shake down mercury to 95°F (35°C), if necessary.
7.	Place thermometer under patient's tongue, as far back as possible, into either heat pocket (as illustrated), 
8.	Tell patient to keep mouth closed and not to talk.
9.	Leave thermometer in place for three minutes.
10.	Remove thermometer.
11.	Wipe thermometer with tissue from stem end to bulb end. Discard tissue.
12.	Do not touch any part of the thermometer that has been in the patient's mouth.
13.	Read the thermometer and then place it on a tissue.
14.	Write the temperature (pulse, and respirations) on paper.
15.	Clean and dry thermometer.
16.	Store thermometer in holder in proper location.
17.	Wash your hands.
18.	Record temperature on patient record. Indicate (O) for oral temperature.
19.	Report abnormal temperature to patient's physician.

Remember, if your patient has had something hot or cold to eat or drink or has smoked, wait 15 minutes before taking the temperature. Follow all procedures as described.

Taking an Oral Temperature with an Electronic Thermometer

VITAL SIGNS

Materials Needed

Electronic thermometer
Tissues or cotton balls
Pencil and paper

Procedure

1.	Explain what you are going to do (Remind patient not to eat, drink, or smoke for 15 minutes.)
2.	Have patient lie down or rest in a chair.
3.	Wash your hands.
4.	Obtain materials listed above.
5.	Clean thermometer.
6.	Turn on thermometer
7.	Wait until it reads “0” or shows “—” on the digital display window.
8.	Place thermometer under patient’s tongue, as far back as possible, into either heat pocket.
9.	Tell patient to keep mouth closed and not to talk.
10.	Leave thermometer in place until you hear it beep. (You may take pulse and respiration at this time.)
11.	Remove thermometer.
12.	Wipe thermometer with tissue from stem end to bulb end. Discard tissue. Do not touch any part of the thermometer that has been in the patient’s mouth.
13.	Read the thermometer and then place it on a tissue
14.	Write the temperature (pulse and respirations) on the paper.
15.	Clean and dry thermometer.
16.	Turn off thermometer.
17.	Store thermometer in the holder in proper location.

Taking an Axillary Temperature (Underarm)

VITAL SIGNS

Axillary temperature is taken when the oral method cannot be used. This method may be used for adults, children, and infants. It is the least accurate method of measuring temperature. However, it is preferred over the rectal temperature because it is not damaging to body tissue. Also, since there is no contact with body fluids, there is reduced risk of infection.

The axilla (armpit) is dried before beginning the procedure. Hold the thermometer in contact with the skin surfaces. This will ensure an accurate reading. Have your patient sit or lie down during the procedure. The glass thermometer remains in place for 10 minutes, and the electronic thermometer remains in place until a beeping sound is heard, about two to three minutes.

Materials Needed

Glass oral thermometer
Tissues or cotton balls
Watch with sweep-second hand
Pencil and paper

Procedure

1.	Explain what you are going to do (Remind patient not to eat, drink, or smoke for 15 minutes.)
2.	Have patient lie down or rest in a chair.
3.	Wash your hands.
4.	Obtain materials listed above.
5.	Clean thermometer.
6.	Shake down mercury to 95°F (35°C). Turn on electronic thermometer.
7.	Provide privacy.
8.	Roll up patient's sleeve to expose axilla. Dry axilla with towel or washcloth.
9.	Put patient's arm across chest to hold thermometer in place. For infant or child, hold arm in place as necessary.
10.	Leave thermometer in place: Glass—10 minutes

	Electronic—until “beep” is heard (You may take pulse and respirations at this time.)
11.	Remove thermometer.
12.	Wipe with tissue from stem end to bulb.
13.	Read the thermometer and then place it on a tissue.
14.	Write the temperature on the paper.
15.	Help patient put arm back in sleeve.
16.	Turn off electronic thermometer, if used.
17.	Clean and dry thermometer.
18.	Wash your hands.
19.	Record temperature on patient record. Indicate (A) for axillary temperature.

Taking a Rectal Temperature

Rectal temperatures are taken when the oral and axillary routes cannot be used. Rectal temperature is not taken when the patient has diarrhea, rectal disease or surgery, and certain types of heart and blood diseases.

A glass rectal thermometer is usually used. NOTE: Rectal thermometers are used in the rectum only. They are never to be used in the mouth. Lubricate for easy insertion and to prevent damage to rectal tissue. Gently insert the tip of the thermometer into the rectum. Do not push if you have difficulty inserting the thermometer. Always hold the thermometer in place to prevent breakage and its being lost in the rectum.

Materials needed

Glass rectal thermometer.
Watch with sweep-second hand
Toilet tissue
Disposable gloves
Water-soluble lubricant
Paper and pencil

VITAL SIGNS

Procedure

1.	Explain what you are going to do.
2.	Put patient in bed.
3.	Wash your hands.
4.	Obtain materials listed above.
5.	Clean glass thermometer.
6.	Shake down mercury.
7.	Provide privacy.
8.	Put on gloves.
9.	Place small amount of lubricant on toilet tissue. Lubricate bulb end of thermometer.
10.	Fold back top linens and remove clothing to expose anal area.
11.	Raise upper buttock to expose anus.
12.	Gently insert thermometer one inch into the rectum.
13.	Hold in place for three minutes.
14.	Remove thermometer.
15.	Wipe thermometer with toilet tissue from stem end to bulb end. Place soiled tissue on several folded layers of toilet tissue.
16.	Place thermometer on clean toilet tissue.
17.	Cleanse excess lubricant and feces from anal area using toilet tissue.
18.	Replace clothing and cover patient.
19.	Discard soiled toilet tissue into toilet.
20.	Remove gloves and wash your hands.
21.	Read the thermometer and then place it back on tissue.
22.	Write the temperature on the paper.
23.	Clean and dry thermometer.
24.	Store thermometer in holder in proper location.
25.	Wash your hands.
26.	Make sure patient is safe and comfortable.
27.	Record temperature on patient record. Indicate ® for rectal temperature.

Reporting Changes from Normal Temperature

VITAL SIGNS

Notify your doctor's office if your temperature is above the normal range. When a fever is present, a patient may have other symptoms: headaches, chills, and sweating. Keep the patient warm with extra clothing or blankets. Remove these if the patient sweats and complains of feeling hot. Change wet clothing as needed. Make sure the patient drinks fluids.

Pulse

The pulse is caused by the beating of the heart. With each beat, the heart forces blood to flow out through the arteries of the body. The pulse rate shows the number of heartbeats that are felt in an artery during one minute. The pulse rate can be slower or faster depending on several factors:

Exercise	immediately after climbing stairs, the rate will be higher than when sitting and watching TV
Age	infants have higher than adults
Fever	elevated temperature and pulse usually go together
Excitement or fear	causes the heart to beat faster
Pain	may also cause the heart to beat faster
Medications	some are used to slow down the pulse rate; others are used to raise the pulse rate

Force and Rhythm

When taking the pulse, you will also need to note its force and rhythm. The force shows the strength of each beat. A strong pulse is usually easy to feel. A weak pulse is usually hard to feel. The rhythm, or pattern of beats, should be regular. This means that the times between each beat is the same. The heart beating unevenly or skipping beats causes an irregular pulse. It is very important to note the force and rhythm of the pulse rate. Record and report weak and/or irregular pulse rates to your doctor.

Respirations

The act of inhaling oxygen and exhaling carbon dioxide is called respiration. During one respiration, the chest usually rises as air enters the lungs (inhalation) and falls as air is pushed out of the nose and mouth (exhalation). The rate of respirations means the number of times the chest rises and falls during a one-minute period. You may find that some patients use their abdominal muscles rather that chest muscles to help them breathe. In these cases, the chest may not rise and fall. Rather, the abdomen rises and falls with each breath.

The rate of respirations is one way to tell the health of the respiratory system. Since both the circulatory and respiratory systems work closely together, the pulse and respiratory rates are affected by similar factors. For example, running to the bus stop causes the heart rate to increase (pulse) and breathing (respirations) to increase also. Exercise, age, fever, excitement or fear, and medications influence the respiratory rate. In healthy persons, the normal respiratory rate is

Adult's	12-20 respirations per minute

Depth, Pattern, and Effort of Respirations

When taking the patient's respirations, also note the depth, pattern, and effort of breathing while counting each respiration. In normal respirations, both sides of the chest rise and fall equally. The respirations are regular in pattern and depth; they are quiet and without effort. Use the following guidelines when observing your patients respirations.

Rate

Normal	12-20
Abnormal	under 12 or over 20

Depth

VITAL SIGNS

Normal	both sides of chest rise and fall equally
Shallow	breath is short
Deep	breath is long and deep

Pattern

Regular	each inhalation and exhalation is at the same rate
Irregular	may have periods where no breath is taken followed by rapid or slow, shallow breathes

Noise

Normal	breathing is quiet
Abnormal	raspy, gurgling, wheezy breathing

Effort

Normal	breathing is easy, without effort
Abnormal	breathing is difficult, painful, or takes great effort

Taking Respirations

Procedure

1.	Continue holding patient's wrist after taking the pulse.
2.	Count each rise and fall of the chest or abdomen as one respiration.
3.	Count respirations for one minute.
4.	**Observe for the following:** Deep or shallow breathing Painful or difficulty breathing Noisy breathing
5.	Assist patient, as needed, into desired position.
6.	Wash your hands.
7.	Record respirations on patient record.
8.	Report any abnormal respirations to your doctor's office.

VITAL SIGNS

Take the patient's respirations when he or she is resting. Wait 15 minutes after exercise or activity to allow the respiratory system time to adjust to normal. Have patient sit or lie down so that you can see the chest rise and fall. For abdominal breathers, you may need to rest your hand on the abdomen and notice the rise and fall of your hand. Respirations can be controlled to some extent by the patient, especially if he or she knows you are taking the respirations. This may result in an incorrect count. So do not tell the patient you are taking respirations. After taking the pulse, just keep your fingers on the pulse while watching the rise and fall of the patient's chest. In this way, the patient will think that you are still taking the pulse.

Blood pressure

Any blood pressure reading that is not within normal range or changes from what is normal for your patient.

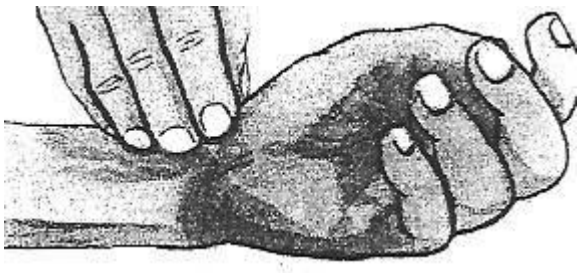
Taking a Radial Pulse

Materials Needed

Watch with sweep-second hand
Pencil and paper

Procedure

1.	Explain what you are going to do.
2.	Ask patient to sit or lie down.
3.	Wash your hands.
4.	Obtain materials listed above.

5.	Locate radial pulse. Use your middle three fingers to press down on radial artery. 
6.	Note the following: strong or weak, regular or irregular.
7.	Count the beats for one minute.
8.	Assist patient, as needed, into desired position.
9.	Record pulse on patient record.

The pulse is taken on the radial artery. This artery is located on the palm side of the wrist at the base of the thumb. Use your three middle fingers to press against the wrist bone to feel the blood pumping through the radial artery. Do not use your thumb to take the patient's pulse. Your thumb has its own artery, and you may mistake your pulse for the patient's. Take the pulse for one full minute and note the rate, force, and rhythm of the beats.

Do not take your patient's pulse immediately after any physical activity such as climbing the stairs or using the bathroom. Wait for 15 minutes before taking the pulse to get an accurate reading.

Measuring Blood Pressure

Blood pressure is the force of the blood that pushes against the walls of the blood vessels. When taking the patient's blood pressure, you are measuring the force of the blood flowing through the arteries. The heart pumping blood into the arteries causes this force. It is this force that makes the blood circulate to all parts of the body.

VITAL SIGNS

The amount of pressure in the arteries depends on two factors: the patient's heart rate and how easily blood flows through the blood vessels.

When taking your patient's blood pressure, you are measuring two pressures:

Systolic pressure	the higher reading and is listed first, the top number.
Diastolic pressure	the lower reading and is listed below the systolic reading.

Factors Affecting Blood Pressure

Like the patient's temperature, pulse, and respirations, blood pressure also is affected by many factors. For example, anxiety, fear, and pain can cause an increase in blood pressure. Exercise can also cause the blood pressure to rise due to the increased effort of the heart to pump blood to the body. This rise is usually only temporary. Have the patient sit and rest for 15 minutes before taking the blood pressure.

Illness of the circulatory system may cause the blood pressure to become higher or lower. Patients with conditions that affect the heart, blood, or blood vessels will usually have their blood pressure taken regularly. These conditions include:

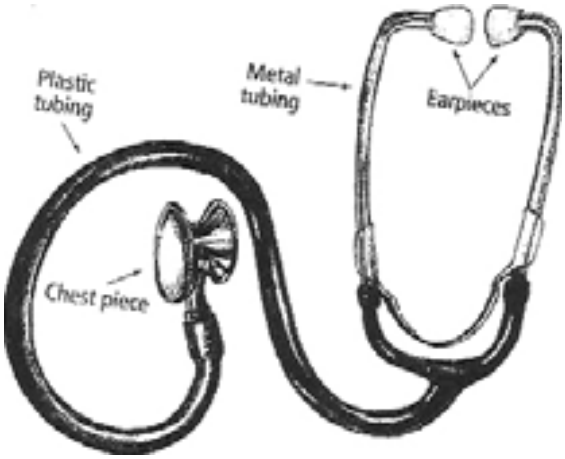
Hypertension
Hypotension
Certain heart diseases
Kidney diseases
Problems with pregnancy

Your doctor will explain what to look for when taking your patient's blood pressure. It is important to know your patient's usual blood pressure. The normal adult blood pressure is considered to be 120/80. However, the normal range is between 100/70 and 140/90. Notify your doctor when the pressure is higher or lower than the "usual" reading for the patient.

VITAL SIGNS

Guidelines for Taking Vital Signs

Take vital signs when patient has been resting for 15 minutes.
Take vital signs when patient is sitting or lying down.
Ask patient not to talk while you take the vital signs.
Take the temperature while taking the pulse and respirations.
Record vital signs immediately after taking them, using paper and pencil; transfer this information to the patient's care record.
Record the method of taking the temperature: (O) for oral (R) for rectal, and (A) for axillary.



Equipment Needed

There are two items needed to take a blood pressure reading: the stethoscope and the blood pressure cuff.

Using a Stethoscope

The stethoscope is an instrument used to listen to sounds produced in the body. Invented in the early 1800s, it is said to be one of the ten greatest contributions to medical science. By hearing the sounds of the heart, arteries, lungs, abdomen, and

other body cavities, caregivers are able to help diagnose illnesses more efficiently. Basically, the stethoscope makes body sounds easier to hear. It magnifies sound like a hearing aid. These are the three parts of the stethoscope:

1.	Earpieces—block out outside noises and receive sound from the tubing.
2.	Metal and plastic tubing—connect earpieces to chest piece (diaphragm) or bell. Sound travels through the tubing to the earpieces.
3.	Chest piece (diaphragm) or bell—transmits sound to the tubing when placed over a part of the body: a. Chest piece (diaphragm)—a round, flat piece b. Bell—a bell-shaped piece

The following are tips to follow when using a stethoscope:

Wipe earpieces and chest piece with antiseptic wipes before and after using the stethoscope to prevent spread of diseases.
Shut off radio, TV, and reduce other external noises before using stethoscope.
Ask patient not to talk or move during the procedure.
Warm the chest piece (diaphragm) or bell with your hands before placing it on the patient's body.
Do not touch the metal or plastic tubing after earpieces are inserted into the ear—the noise will be very irritating to you.
Store stethoscope in the proper location after use.

Using the Blood Pressure Cuff

The blood pressure cuff is an instrument placed over an artery to measure the pressure of the blood. There are four parts to this instrument:

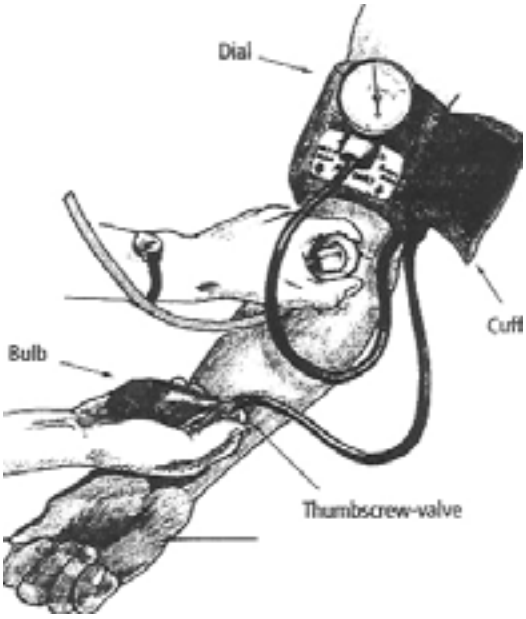
1. Dial	shows numbers from 20 to 300 and has a pointer. Each line represents 2 mm (millimeters) of mercury. These parts can also be called the gauge or scale.

2. Cuff	contains a cloth-covered rubber bag that can be inflated. The cuff fits around the arm with the rubber bag positioned over the artery.
3. Valve	a thumbscrew opens and closes the valve. The valve controls the air that goes in and out of the cuff.
4. Bulb	allows air to enter the rubber bag in the cuff when the bulb is squeezed.

Taking the Blood Pressure

Taking an accurate blood pressure requires a great deal of skill. Several skills are involved and all are used at the same time.

Hearing	the sounds of the blood in the artery. Seeing and Reading—the pointer on the dial.
Handling	the thumbscrew and squeezing the bulb to inflate and deflate the rubber bag in the cuff
Remembering	the readings so they can be accurately recorded when you finish taking the blood pressure.



VITAL SIGNS

Measuring Blood Pressure

Materials Needed

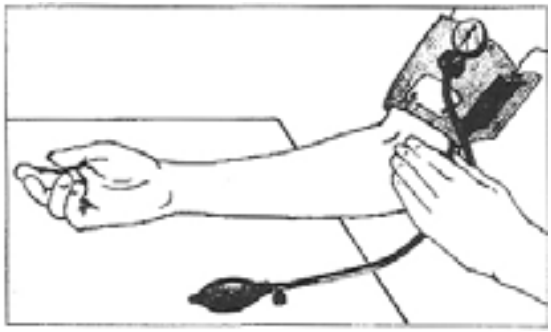
Blood pressure cuff
Stethoscope
Antiseptic wipes
Paper and pencil

Procedure

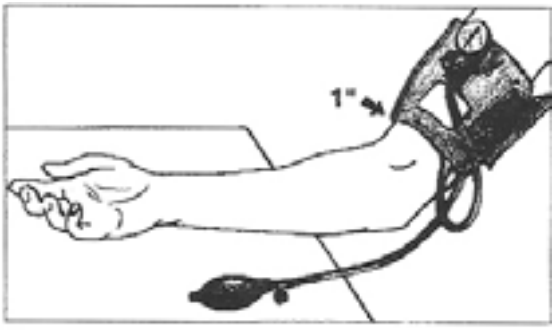
1.	Explain what you are going to do.
2.	Ask patient to sit or lie down.
3.	Wash your hands.
4.	Obtain materials listed above.
5.	Wipe stethoscope earpieces and chest piece (diaphragm) or bell with antiseptic wipes.
6.	Place the person's arm in a position level with the heart, palm up, supported by low(s), table, or arm of chair.
7.	Expose the patient's upper arm. Remove patient's clothing so that area is bare.
8.	Squeeze the blood pressure cuff to expel any air. Close the valve of the bulb.
9.	Find the brachial artery by feeling the pulse at the inner side of the elbow.
10.	Wrap the cuff around the patient's arm, at least one inch above the bend in the arm. Make sure it is secure and even. Position the rubber bag over the artery.
11.	Put stethoscope earpiece in your ear.
12.	Place fingers over radial pulse. Inflate the cuff until you cannot feel the radial pulse. Inflate the full 30 mm beyond the point at which you last felt the pulse.
13.	Place the stethoscope chest piece over the brachial artery.

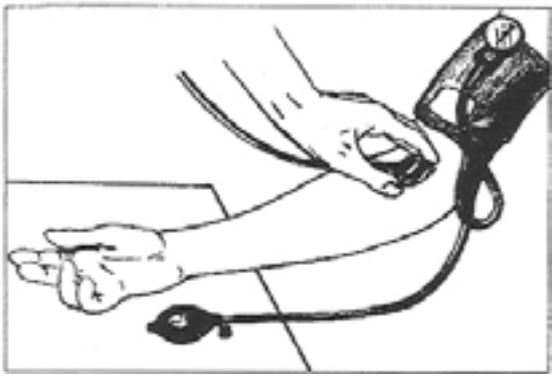
VITAL SIGNS

14.	Keep your eyes on the dial and begin to deflate the cuff slowly and evenly (two to four millimeters per second) by turning the valve of the bulb counterclockwise.
15.	Note the first sound you hear and read the dial at this point. This is the systolic pressure reading.
16.	Keep eyes on dial and continue to deflate the cuff. Note the last sound you hear and read the dial at this point. This is the diastolic pressure reading.
17.	Deflate the cuff completely. Remove the stethoscope and cuff from the patient's arm.
18.	Record the blood pressure reading on the patient record.
19.	Report blood pressure readings that are above or below normal to the patient's doctor.
20.	Clean the stethoscope with the antiseptic wipes, and then wash your hands.



VITAL SIGNS





REMINDERS WHEN MEASURING BLOOD PRESSURE

Ask patient not to talk during the procedure.
Shut off radio, TV, and reduce other background noise (if possible).
Remove clothing from the arm.
Wrap the cuff snugly around the patient's arm; make sure the edge of the cuff is above the bend in the arm and the rubber bag is over the artery.
Place the dial in the holder attached to the cuff; make sure you have a clear view of the dial.
Do not take the blood pressure in the patient's arm that: Is injured or paralyzed Has a cast Has an IV infusion

REPORT TO YOUR DOCTOR'S OFFICE

Temperature

VITAL SIGNS

Increase (Fever): Oral—Above 99.9°F (37.8°C) Rectal—Above 100.9°F (38.8°C) Axillary—Above 98.9°F (38°C)
Decreased: Oral—Below 97.5°F (36.5°C) Rectal—Below 98.5°F (37°C) Axillary—Below 96.5°F (36°C)
Major change from what is “normal” for your patient

Pulse

Below 60 beats per minute
Above 100 beats per minute
Change in rhythm or force of beats

Respirations

Below 12 respirations per minute
Above 20 respirations per minute
Changes in pattern or depth of respirations
Difficulty breathing
Noisy breathing

Preventing Infection

It is important to prevent the spread of infection when taking the patient’s vital signs. Infection may be spread by improper cleaning of equipment and by contact with the patient’s body fluids.

Rules when Taking a Patient’s Vital Signs

VITAL SIGNS

Wash your hands before and after taking vital signs.
Wash glass or electronic thermometer before and after use.
Discard used cleaning materials after cleaning thermometer.
Wipe stethoscope's earpieces and chest piece with antiseptic wipes before and after use.
Wear gloves when there is risk of coming in contact with the patient's body fluids.