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ABSTRACT

This document, which is designed for students preparing to become a certified nurses' aide, contains instructional text and learning activities organized in nine sections. The following topics are covered: the role of the certified nurse's aide (job duties, personal health, professionalism, code of ethics); infection control (the infection process, disease prevention, handwashing); ethics (ethical issues, ethical standards, legal issues affecting health care, patients' bill of rights); safety precautions (fire prevention, smoking precautions, fire extinguishers, environmental safety precautions); nutrition (food groups, types of diets, and procedures for serving a food tray); medical terminology (vocabulary, prefixes and suffixes, abbreviations); bathing (general suggestions, equipment, preparations, bed baths, finishing touches, back rubs); vital signs (radial pulse, respiration, temperature, thermometers, blood pressure; and fluid intake and output and death and dying (fluid imbalances, attitudes regarding death, and stages of grief and appropriate certified nurse's aide responses). Each section contains the some or all of the following: instructional text, vocabulary sheet, illustrations, charts, learning activities, and a competency test. The tests include multiple-choice, matching, and open-ended questions. (MN)

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**MASSACHUSETTS CAREER DEVELOPMENT  
INSTITUTE**



**CERTIFIED NURSES' AIDE  
JOB-RELATED CURRICULUM**

**359 Dwight Street  
Holyoke, Ma 01040  
(413) 532-2683**

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# THE ROLE OF THE CNA

## **THE ROLE OF THE CERTIFIED NURSES' AIDE (CNA)**

**All people, regardless of age, have basic human needs that must be met in order to live a full human life. This is particularly true for people who are sick. The role of nurses' aides is to care for the whole person in body, mind, and spirit. Their responsibility is to meet the physical, psychological, emotional, and spiritual needs of people under their care.**

**Needs vary depending on each person's state of health. Physical tasks CNAs perform for the sick are to help them eat, dress, bathe, walk, exercise, move, use bedpan, rest, etc. Other tasks include making beds, taking vital signs, changing bandages, creating a safe environment, giving back rubs etc.**

**Providing psychological and emotional needs are also important when caring for the sick. Emotional needs pertain to feelings like treating the patient with dignity and respect, giving them love, praise, encouragement and support. Taking care of psychological and emotional needs often make physical care easier.**

**Many people call upon the spiritual part of their being to help them during times of sickness or death. Spiritual needs are personal and different for everyone. Nurses' aides must be aware of individuals' religious preferences and how they wish to exercise them.**

**Good health care is providing for all of these needs.**

### **PERSONAL HEALTH**

**Caring for others is demanding and hard work. The CNAs must be in good emotional and physical health in order to provide quality care for others. Ways to stay healthy are to sleep seven to nine hours a night, eat three balanced meals a day, exercise, visit the doctor regularly, set aside time to relax, visit the dentist twice yearly, and get a TB test every two years.**

## PROFESSIONALISM OF A NURSES' AIDE

To do a good job as a nurses' aide, it is important to deal with patients, staff, and families in a professional manner. This includes professional appearance and behavior. The chart below provides some practical suggestions about professional dress and behavior.

<b>UNIFORM</b>	The uniform should be clean, in good repair, fit properly, and washed frequently.
<b>HOSIERY</b>	Use neutral shades of stockings. Use knee highs only with pant uniforms.
<b>UNDERWEAR</b>	Wear white, non-cling underwear and wash it daily.
<b>SWEATER</b>	Wear sweaters with lightweight material and place arms in the sleeves. Wash it frequently.
<b>SHOES/LACES</b>	Wear shoes with a low or medium heel. Laces should be clean.
<b>HAIR</b>	Long hair should be tied with a ribbon, with no scarves or bandannas.
<b>PERSONAL</b>	Bathe daily and use effective deodorant, wash hands frequently, have clean and short fingernails, brush teeth at least twice daily, and use mouthwash if necessary.
<b>JEWELRY MAKEUP</b>	Wear a watch, nursing pin, wedding/engagement ring. Use only post earrings. Wear moderate makeup.
<b>PERSONAL BEHAVIOR</b>	Don't chew gum and avoid loud talking, laughing, and profanity. Work and speak quietly. Be friendly to everyone.
<b>BEHAVIOR TO PATIENT/STAFF</b>	Don't talk about personal problems when on duty. Don't discuss patients' medical condition or give out confidential information.

## **CODE OF ETHICS**

**The many duties required of nurses' aides form a way of behavior called a code of ethics. Ethics is a system of moral behavior. Here are some of the ethical principles to follow:**

- 1. Respect the right of others to have a useful, happy life.**
- 2. Consider the basic human needs of patients.**
- 3. Preserve life, ease suffering, and work to restore health.**
- 4. Be loyal and sincere to all people.**
- 5. Practice good health habits as a care giver.**
- 6. Be neat and well groomed.**
- 7. Treat all with respect, care, and equality, regardless of race or religion.**
- 8. Keep information about residents confidential.**
- 9. Carry out duties as best as possible. Respect the work of others.**
- 10. Only do work for which one is qualified.**
- 11. Keep personal problems and affairs from patients.**
- 12. Learn new procedures to improve the quality of care.**
- 13. If actions of others are questionable, go to your supervisor.**
- 14. Make patients' welfare and safety the first concern.**

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

- 1. PSYCHOLOGICAL** - relating to the mind  
Psychological needs pertain to feelings.
- 2. PHYSICAL** - referring to the body  
Physical tasks are easy to identify when caring for someone.
- 3. SPIRITUAL** - sacred matters about God  
Spiritual needs are personal and different for everyone.
- 4. ROLE** - the function of a position  
Good health care is the main role of a CNA.
- 5. PROFESSIONAL** - conforming to standards of a given career  
Deal with patients, staff, and families in a professional manner.
- 6. PERSONAL** - referring to a person, private  
Don't talk about personal problems when on the job.
- 7. RESPECT** - high regard for someone  
Respect the rights of others at all times.
- 8. EMOTIONAL** - relating to feelings  
Giving support is an emotional service.
- 9. CONFIDENTIAL** - entrust with private information  
Don't discuss patient's confidential information.
- 10. ETHICS** - a system of moral behavior  
CNAs need to follow a code of ethics.

**THE ROLE OF THE CERTIFIED NURSES' AIDE  
COMPETENCY TEST**

Circle the letter that gives the BEST answer to each statement.

1. An example of a psychological need is
  - a. eating special food.
  - b. observing religious holidays.
  - c. wanting love and respect.
  - d. going to exercise class.
  
2. The meaning of ethics is
  - a. a system of moral behavior.
  - b. a system of professionalism.
  - c. being in good health.
  - d. wearing the right kind of uniform.
  
3. An example of a physical need is
  - a. attending religious services.
  - b. depending on another person to walk.
  - c. having a sense of belonging.
  - d. wanting praise.
  
4. The meaning of personal is
  - a. sacred.
  - b. high regard.
  - c. moral.
  - d. private.

Answer true or false to the following statements.

5. CNAs need not worry about patients' religious beliefs. \_\_\_\_\_
6. Caring for others is not demanding work. \_\_\_\_\_
7. Long hair is acceptable if it is tied with a ribbon. \_\_\_\_\_

**8. List three ways CNAs should take care of themselves.**

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**9. List three ways a CNA should dress professionally.**

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# INFECTION CONTROL

8

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## INFECTION CONTROL

Humans are surrounded by tiny living beings called germs which can only be seen under a microscope. Though we cannot see germs, they are everywhere: on the skin, in the mouth and body, in and on food, and on everything people touch.

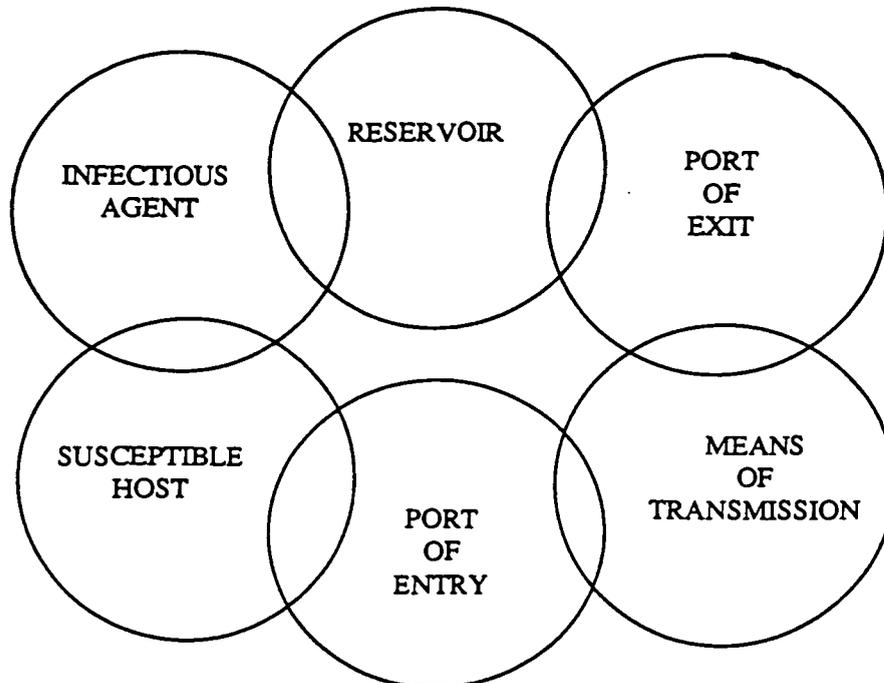
If our natural body defenses are not working properly, the body is affected by infection. An infection is caused when germs grow and multiply within the body. If infections are not treated, they can spread into the blood and be carried throughout the body.

Some common types of infections are:

- |                 |  |
|-----------------|--|
| <b>VIRUSES</b>  | - like those that cause the common cold.                                   |
| <b>BACTERIA</b> | - like sore throats, skin infection, and urinary infection.                |
| <b>FUNGUS</b>   | - like athlete's feet, or infection in the groin or under the fingernails. |

## THE INFECTION PROCESS

The infection process is how diseases develop and spread. It is like a chain where all the parts work together. If any one link is broken, the process stops and the spread of disease is interrupted.



**Below is how the infection process operates.**

**INFECTIOUS AGENT**

**This is the germ.**



**RESERVOIR**

**This is the place where the germ grows and develops. They are found in humans, animals, the environment, or equipment.**



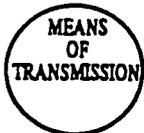
**PORT OF EXIT**

**This is where germs leave the reservoir. Examples might be through urine, blood, saliva, tears, and bed linen.**



**MEANS OF TRANSMISSION**

**This is the way the germ travels from the port of exit to the port of entry. Examples are direct contact from person to person, or indirect contact through talking, sneezing, or coughing.**



**PORT OF ENTRY**

**This is the way the germ gets inside. Examples are break in the skin, mouth, cuts, food, etc.**



**SUSCEPTIBLE HOST**

**This is the person who harbors the germs.**



## DISEASE PREVENTION

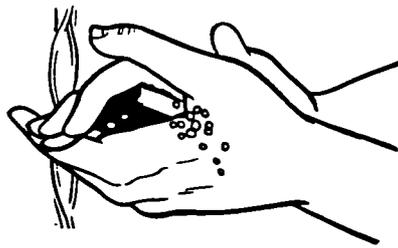
Safety measures must be taken to prevent or limit the spread of germs causing diseases. Hand washing is the most effective way to prevent and control disease. It is the most important way to break the chain of infection. Hands need to be washed in the following instances:

- when soiled.
- after using the toilet.
- before and after contact with the patient.
- before handling food or food trays.
- before and after eating.
- after combing hair.
- after using a handkerchief or tissue.
- after handling patients' belongings or equipment used in their care.

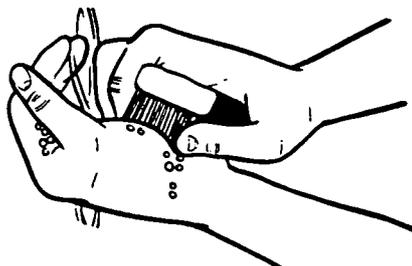
## HAND WASHING

When washing hands, it is better to use soap from a dispenser rather than to use a bar. Germs grow more easily in a wet soap dish. Use the following procedure when hand washing:

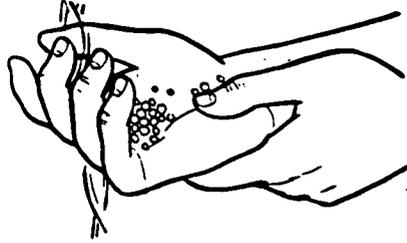
1. Completely wet hands and wrist using water at a comfortable temperature.



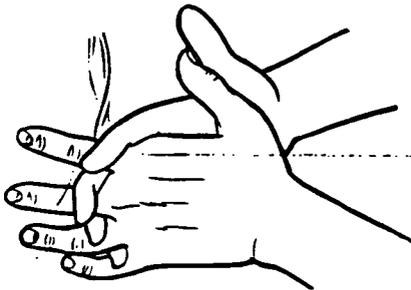
2. Soap hands and wrist using friction to work the soap into a lather. If necessary and available, use a brush.



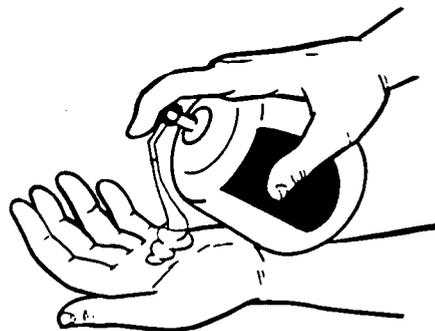
3. Wash the entire surface of the hands and wrists, especially between fingers and under fingernails. Interlace the fingers to clean them. If bar soap is used, rinse it off so it will be clean for the next person to use.



4. Don't touch the sides of the sink. The sink is considered to be contaminated.
5. Rinse well while lowering the hands with fingernails downward. This allows the rinse water to run down into the sink.



6. Dry hands carefully with a paper towel. Wet skin may cause chapping that could break the skin. Apply hand lotion if desired.



7. Turn off the water tap with a paper towel to protect hands from any dirt on the faucet.

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **CONTAMINATED** - unclean, soiled with germs  
The sink is considered to be contaminated.
  
2. **DISEASE** - a condition resulting from infection  
Safety measures limit the spread of disease.
  
3. **INTERLACE** - to blend  
Interlace the fingers to clean them.
  
4. **LATHER** - a foam formed by soap  
Work the soap into a lather.
  
5. **DEFENSES** - resist diseases  
If our body defenses are not working, the body is affected by infection.
  
6. **FRICTION** - rubbing the surface  
Use friction to work the soap into a lather.
  
7. **PROCESS** - a series of actions  
If one link is broken, the process stops.
  
8. **SUSCEPTIBLE** - easily affected, sensitive  
The susceptible host harbors the germ.
  
9. **CONTACT** - touching, coming together  
Wash hands before and after contact with the patient.
  
10. **INFECTION** - an invasion by germs  
An infection is caused when germs grow and multiply within the body.



9. Number the infection process in the order in which they occur.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



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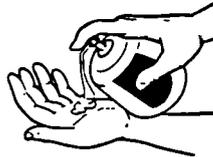


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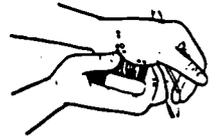
7. Number the hand washing process in the proper order.



\_\_\_\_\_



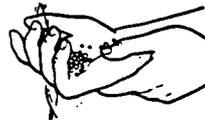
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\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

**ETHICAL AND LEGAL ISSUES**  
**PATIENTS' BILL OF RIGHTS**

## **ETHICAL AND LEGAL ISSUES**

**Our country protects the basic human rights of every individual through its Constitution. The Constitution guarantees that each individual be treated with respect and dignity. In the medical field, these rights are codified in a document called the “Patient’s Bill of Rights” and ensure the following rights to:**

- **be treated fairly without discrimination.**
- **voice concerns and have complaints resolved.**
- **be informed of costs and charges.**
- **participate in decisions about one’s care.**
- **choose the source of services and supplies.**
- **manage personal and financial affairs.**
- **be free from unreasonable restraints.**
- **have privacy, especially with one’s spouse.**
- **be exempt from performing services unwillingly.**
- **communicate and associate with others.**
- **use personal clothing and possessions.**
- **have personal affairs held in confidence.**

## **ETHICAL STANDARDS**

**In addition to the Patient’s Bill of Rights, CNAs are guided by ethical standards. Ethical standards are developed to ensure that safe, quality care is given to patients.**

1. **The most basic rule is that life is precious and must be preserved whenever possible.**
2. **Persons should be treated with dignity. Endearing terms like “honey” or “tootsie” is demeaning and has no place in a professional setting.**
3. **Respect the patient’s privacy, especially with dressing, bathing, or when using the bedpan or toilet.**
4. **Don’t let personal feelings or dislikes toward some patients interfere with quality care. All patients deserve the best care possible.**
5. **Keep information about patients and their families confidential.**
6. **If patients’ welfare and safety are questionable because of unethical actions from other health care providers, make the fact known to the supervisor.**

7. **CNAs may occasionally be offered money. Refuse money firmly but courteously.**
8. **A competent patient has the right to refuse treatment and medications.**

**The Patient's Bill of Rights and Ethical Standards are laws that help protect patients. Failure to obey them can have grave consequences. Therefore, it is important to understand the legal ramifications of unethical actions.**

### **LEGAL ISSUES AFFECTING HEALTH CARE**

**Legal issues of concern to CNAs include the following: negligence, theft, defamation, assault and battery, invasion of privacy, and abuse. Failure to obey the law regarding these issues can result in fines or imprisonment.**

**NEGLIGENCE - failure to give care required by the job.**

**EXAMPLES: A person is left unattended. The patient is burned because an enema solution was too hot. A patient is kept in soiled linens.**

**THEFT - stealing things.**

**EXAMPLES: taking washcloths, drugs, or patient's personal belongings.**

**DEFAMATION - telling or writing false statements that can harm a patient's reputation.**

**EXAMPLE: Inaccurately tell someone that your patient has AIDS. Write or say false things that cause shame, anxiety, or loss of good will.**

**ASSAULT AND BATTERY - A verbal or physical threat which causes fear, harm, or injury.  
-Touching another in a rough and hurtful way without permission.**

**EXAMPLE: A person does not wish a back rub but it is forced to have one anyway.**

**INVASION OF  
PRIVACY**

- Personal information is not discussed publicly without permission.

**EXAMPLES:** The CNA listens to a patient's phone call. Religious beliefs are forced on another.

**PHYSICAL  
ABUSE**

- Physical harm is given to a patient.

**EXAMPLES:** Perform the wrong treatment. Failure to turn the patient in bed and cause poor circulation. Hit, push, pinch, or hold patient too roughly. Failure to answer the red light.

**VERBAL ABUSE**

- Abuse persons with words.

**EXAMPLES:** Use words of profanity, raise the voice in anger, treat unkindly, or call patient unpleasant names.

**PSYCHOLOGICAL  
ABUSE**

- Do harm to the mind.

**EXAMPLES;** Threaten, make fun of, or belittle a patient.

**In most cases, patient abuse originates from feelings of fatigue or frustration. If a patient tests the CNA beyond endurance, a temporary change be necessary.**

**When all is said and done, the Golden Rule is the most useful guide for assuring the right of patients: "Care for others as you would want to be cared for yourself."**

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **CODIFIED** - arrangement of rules or laws  
Rights were codified in a document called the Patient's Bill of Rights.
2. **ETHICAL** - right conduct  
CNAs are guided by ethical standards
3. **DISCRIMINATION** - show preference or prejudice  
Patients should be treated fairly without discrimination.
4. **CONFIDENTIAL** - to keep private  
Keep information about patients confidential.
5. **QUALITY** - excellence  
Quality care should be given to all patients.
6. **ABUSE** - misuse, batter, violate, insult, offend  
Tormenting a person is one type of abuse.
7. **PRIVACY** - solitude, alone  
Respect patients' privacy, especially when they are using the bedpan.
8. **EXEMPT** - free from a duty  
Patients are exempt from performing services unwillingly.
9. **INTERFERE** - disrupt, hinder  
Don't let dislikes for a patient interfere with quality care.
10. **RESTRAINTS** - hold back or limit from action  
The Patient's Bill of Rights is to be free from unreasonable restraints.

## ETHICAL AND LEGAL ISSUES COMPETENCY TEST

Use the words below to identify the type of abuse in each of the following statements.

physical abuse  
psychological abuse  
invasion of privacy  
defamation

verbal abuse  
negligence  
assault/battery  
theft

1. force a patient to have a back rub
2. threaten a patient
3. tell lies about a patient
4. keep a patient in soiled linens
5. listen to a patient's phone call
6. perform the wrong treatment
7. take a patient's book home to read
8. raise voice in anger

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Identify three patient rights.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

Circle the letter that gives the BEST answer to each statement.

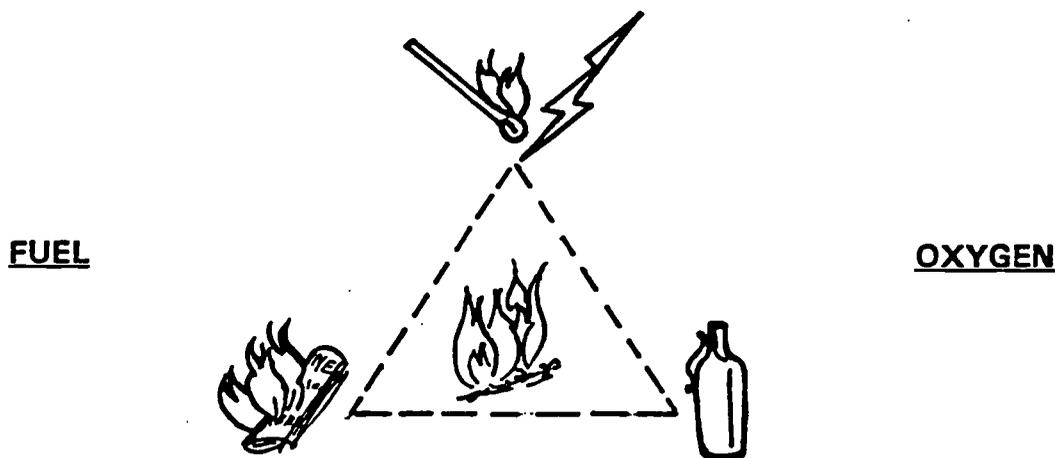
1. Which is NOT a code on the Patient's Bill of Rights
  - a. be informed of medical costs.
  - b. send and receive unopened personal mail.
  - c. schedule for meals.
  - d. be required to perform work without patient's consent.
  
2. An aide slaps a resident. This is a sign of
  - a. neglect.
  - b. verbal abuse.
  - c. physical abuse.
  - d. psychological abuse.
  
3. Personal information about patients may
  - a. never be discussed.
  - b. be discussed during aide's free time.
  - c. be discussed with other patients.
  - d. be used for one's own advantage.
  
4. Protect patient's privacy by
  - a. listening to personal phone calls.
  - b. exposing body parts unnecessarily..
  - c. knocking before entering a room.
  - d. staying when visitors are present.
  
5. Care given to a patient is determined by
  - a. race.
  - b. color.
  - c. need.
  - d. creed.
  
6. Good traits for a nurses' aide include
  - a. interest in others.
  - b. willingness to learn.
  - c. good personal grooming.
  - d. all of the above.

## **SAFETY PRECAUTIONS**

## FIRE PREVENTION

A fire in any situation is a very frightening experience. For patients who are old or confined to bed, the experience is even worse. The best way to keep patients safe from fire is to know fire safety procedures. Prevention is the best guard against fires. There are three basic elements that cause fire: heat, fuel, and oxygen. To prevent fires from starting in the first place, separate these three elements

### FLAME-SPARKS



One way to manage fire control is to know the most common fire hazards and how to prevent them. For example, some fires are caused by frayed and faulty electrical wiring. To be on the lookout for frayed wiring is a preventive measure. Overloading circuits also cause fires.

Avoid the use of too many cords and extension cords. Don't use lightweight cords with heavy equipment. There are appropriate electrical adaptors for plugs when using electrical equipment. Use three-prong plugs for proper grounding.

Empty wastebasket materials in proper disposable units. Keep doorways and traffic lanes free of clutter of any kind. Never store oily rags or paper in closets. Don't place paint and combustible materials near heat. Never use portable heating devices.

## SMOKING PRECAUTIONS

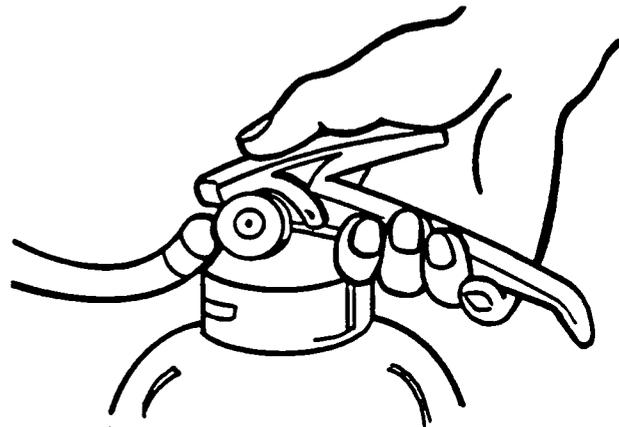
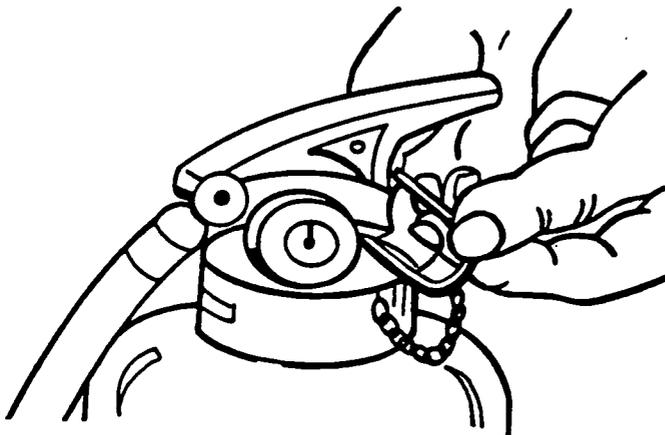
Smoking is a real fire hazard. Clothing and linen ignite easily. Therefore, smoking is never permitted. Confused patients or those on certain medications need direct supervision.

Ashtrays should be provided. Paper cups, trash containers, or plastic bags are not suitable substitutes. Ashes are never emptied in a trash container unless water is mixed with them and everything is extinguished. Be safety conscious and dispose of dry ashes in a metal container.

## FIRE EXTINGUISHER

To be effective in preventing fires, be aware of the location of a fire alarm, extinguishers, fire exits and stairways. An elevator is never used when there is a fire. A fire extinguisher may be used to put out small fires. To operate:

- carry the extinguisher in an upright position,
- remove the safety pin,
- push the top handle down, and
- direct the hose to the base of the fire.



## **ENVIRONMENTAL SAFETY PRECAUTIONS**

**Safety precautions are no small concern because accidents are the fourth largest cause of deaths among people of all ages in the United States. Older people are more prone to accidents due to a decrease in muscle strength and body balance. They also respond more slowly because of hearing and vision impairments. Therefore, accident prevention is important.**

**Attention to safety in the total environment gives everyone a sense of well being and security. Accidents are reduced if simple precautions are taken. The following outline lists the hazards that cause most accidents. Suggestions are given on how they may be prevented.**

### **ARTICLES ON FLOOR AND IN LINE OF TRAFFIC**

**Remove unnecessary articles.  
Keep furniture in regular places.**

### **SPILLS AND SLIPPERY FLOORS**

**Wipe spills immediately. This is important.  
Never leave a person alone in a bath or shower.  
Be cautious of shower chairs tipping over.**

### **POOR LIGHTING**

**Never cover lights with a towel to dim a room.  
Report burned-out light bulbs immediately.**

### **IMPROPER POSITIONING IN BED OR WHEELCHAIR**

**Place patient in correct position.  
Use protective supports for safety and body alignment.**

### **SLIPPERY SHOES**

**Both patient and aide should wear non-slippery shoes or bed slippers.**

### **DISORGANIZED EQUIPMENT**

**Lock brakes on wheelchairs, bed, stretchers, and commodes.  
Place call light, water glass, and bedpan/urinal near patient.  
Be careful when opening doors lest someone is behind them.**

### **HURRYING**

**Slow down.  
The accident prevented could be to the aide as well as other persons.  
When in a nursing home, have residents use handrails.**

**CALL LIGHTS**

Answer call light quickly and as soon as possible.  
Make sure the call bell is in reach of patient or resident.

**BATH WATER TOO HOT**

Check the temperature before bathing resident.

**SPILLING HOT DRINKS**

Assist the patient in pouring hot drinks.

**SMOKING**

See that smoking is done only in smoking areas.  
Caution must be taken when using matches or a lighter.

**SHARP OBJECTS**

The nurse's aide and the patient should keep fingernails short.  
Report cuts and scratches right away.

**UNMARKED CONTAINERS**

Label all containers.  
Read labels before using them.  
Keep cleaning and disinfecting solutions away from patients.

**IMPROPER FEEDING**

Feed patients slowly and in small bites.  
Make sure residents swallow food before offering them more.  
Elevate the head of the bed for eating and drinking.

**PROTECTIVE DEVICES**

Use soft restraints and tie them with a bow so they can be removed easily.  
Check restraints about every half hour. A person can easily slide down.  
Remove restraints every two hours, checking for signs of skin irritation or circulation problems.  
Anticipate the need for water or voiding if a patient cannot provide for these necessities.  
Restrained persons should be in a place where they can be closely observed.

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **PREVENTION** - keep from happening  
**Prevention is the best guard against fire.**
2. **HAZARD** - seeable but unavoidable danger  
**Smoking is a real fire hazard.**
3. **EXTINGUISHED** - put out  
**Ashes are never emptied in a trash container unless water is mixed with them and everything is extinguished.**
4. **APPROPRIATE** - suitable correct, proper  
**There are appropriate electrical adaptors for plugs.**
5. **COMBUSTIBLE** - capable of catching fire  
**Don't place combustible material near heat.**
6. **PRECAUTION** - safeguard, protection  
**Safety precautions are no small concern.**
7. **ENVIRONMENT** - surroundings  
**Safety in the total environment gives everyone a sense of security.**
8. **PROTECTIVE** - sheltering, shielding  
**A restraint is a type of protective devise.**
9. **CAUTIOUS** - alert, watchful  
**Be cautious of shower chairs tipping over.**
10. **COMMUNE** - a chair type of toilet  
**Lock brakes on wheelchair, bed, and commode.**

## SAFETY PRECAUTIONS COMPETENCY TEST

Answer the following questions.

1. What three elements are needed to make a fire?

A. \_\_\_\_\_ B. \_\_\_\_\_ C. \_\_\_\_\_

2. List three common causes of fires.

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

3. Number these fire extinguisher actions in their proper order.

Push the top handle down. \_\_\_\_\_

Carry the extinguisher in an upright position. \_\_\_\_\_

Direct the hose to the base of the fire. \_\_\_\_\_

Remove the safety pin. \_\_\_\_\_

4. Match columns A and B. Write the number in the parenthesis next to the accident prevention.

### COLUMN A

### COLUMN B

- |                           |     |                                       |
|---------------------------|-----|---------------------------------------|
| 1. slipped on the floor   | ( ) | a. Check water temperature.           |
| 2. improper feeding       | ( ) | b. Use a soft restraint.              |
| 3. protective devise      | ( ) | c. Keep fingernails short.            |
| 4. unmarked containers    | ( ) | d. Remove unnecessary articles.       |
| 5. sharp object           | ( ) | e. Replace burned-out lightbulb.      |
| 6. poor lighting          | ( ) | f. Take time to use handrails.        |
| 7. disorganized equipment | ( ) | g. Wear non-slippery shoes, slippers  |
| 8. articles on floor      | ( ) | h. Use the lock on a wheelchair.      |
| 9. hot bath               | ( ) | i. Read labels.                       |
| 10. hurrying              | ( ) | j. Swallow food before offering more. |

# NUTRITION

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## NUTRITION

Food is necessary in order to supply heat and energy to the body, build and repair body tissues, regulate body functions, and maintain good health. The process of utilizing foods in the body is called nutrition. Foods that are essential to maintain this process are proteins, carbohydrates, fats, minerals, and vitamins.

- PROTEINS**
- Proteins are the basic material of every body cell and the only nutrient to make new cells and rebuild tissues.
  - Foods that contain protein are meat, poultry, eggs, milk, and cheese.
- CARBOHYDRATES**
- These nutrients provide heat and energy and supply the body with cellulose (roughage) which helps bowel regularity.
  - Fruits and vegetables contain carbohydrates.
- FATS**
- Pork, butter, nuts, egg yolk, and cheese contain fat.
- VITAMINS**
- Vitamins build strong teeth and bones, foster growth, aid in body functioning, and help fight disease.
  - Vitamins are known by letter names: A, B, C, D, E, and K.
- MINERALS**
- This nutrient builds body tissues and regulates body fluids like blood and digestive juices.
  - Minerals are calcium, phosphorus, iodine, iron, copper, and potassium.
- WATER**
- Since water is essential to life, it is important that patients drink 6-8 glasses of fluids daily. The need for water cannot be stressed enough.

## FOUR FOOD GROUPS CHART

The Four Food Groups chart serves as a guide to ensure that a diet contains the proper amount of nutrients. Study the chart carefully.

GROUP	EXAMPLES	NUMBER, SIZE OF SERVINGS	BODY BENEFIT
MILK GROUP	milk, cheese, ice cream	8 ounces twice a day	<ul style="list-style-type: none"> <li>. bones and teeth growth,</li> <li>. mineral, protein, fats</li> </ul>
FRUITS VEGETABLES	citrus fruits, tomatoes, oranges, peas, beans, spinach, broccoli, carrots, potatoes, salad	3-4 ounces once or more a day  ½ cup cooked	<ul style="list-style-type: none"> <li>. bones, teeth</li> <li>. good vision</li> <li>. quick energy</li> <li>. carbohydrates</li> <li>. vitamins.</li> <li>. minerals</li> </ul>
MEAT FISH POULTRY	liver, beef, pork, lamb, eggs, peanut butter, turkey, chicken	3-4 ounces cooked twice a day	<ul style="list-style-type: none"> <li>. tissue growth</li> <li>. builds muscles</li> <li>. oxygen for cells</li> <li>. proteins,</li> <li>. minerals</li> </ul>
CEREAL WHOLE GRAINS	wheat, rye bread cereals brown rice noodles spaghetti	4 or more daily - 2-3 oz. uncooked pasta 2/3 cup cereal 2 slices bread	<ul style="list-style-type: none"> <li>. quick energy</li> <li>. fights infection</li> <li>. cell formation</li> <li>. carbohydrates</li> <li>. vitamin B</li> </ul>

## **TYPES OF DIETS**

**Patients are often on special types of diets, depending of their physical condition and needs. Listed below are some typical diets.**

### **REGULAR**

**The regular diet includes a well-balanced meal based on the Four Food Groups. It is low in calories and avoids rich foods that are difficult for sick or inactive people to digest.**

### **CLEAR LIQUID**

**This is a temporary one or two day diet of water and carbohydrates for those who had recent surgery. The diet consists of broth, ginger ale, tea, or gelatin. It replaces fluids lost by vomiting or diarrhea.**

### **FULL LIQUID**

**This diet contains the same elements of the clear liquid, plus custards, ice cream, crackers, milk, strained soup, or eggnog. The full liquid diet is ordered for persons with digestive disorders or the flu.**

### **LOW SALT**

**Another name for this diet is the sodium-restricted diet. A low-salt diet is one of the most difficult for residents to follow. Bacon, ham, cheese, canned soups, and luncheon meats are not acceptable. Food low in sodium are cereals, fruits, and vegetables. This diet is ordered for people with hypertension, kidney disease, and heart failure.**

### **CALORIE-CONTROLLED**

**A diet limiting calories is ordered for diabetics and those trying to reduce or gain weight. The dietician tries to balance carbohydrates, fats, and proteins. Some doctors use the formula of 10 calories times the desired weight (120 lbs X 10 = 1200 calories per day.)**

## **PURÉE, CHOPPED, MECHANICAL, SOFT**

**This is the same as a regular diet but the food texture is changed to make it easier to chew or digest.**

## **BLAND**

**A bland diet consists of easily digestive food with little seasoning or gas-forming elements. Bland diets are given to people with ulcers, colitis, or gall bladder disease.**

## **LOW FAT**

**As the name suggests, the diet is for people who cannot digest fats or have gall bladder and cardiovascular problems. The diet limits fried foods, desserts, gravies, salad dressings, and ice cream.**

## **LOW CHOLESTEROL**

**Restricted foods on this diet are whole milk, animal fats, some meats, and egg yolks. The purpose is to lower the cholesterol level in the blood.**

## **HIGH PROTEIN**

**Protein helps repair tissues damaged by disease and skin breakdown. The diet calls for foods high in protein, like milk, lean meats, fish, fowl, and eggs.**

## SERVING THE FOOD TRAY

Observe the following procedures when serving food on a tray.

1. Check the diet card for name of patient, diet, special instructions, or allergies. Some cards are color coded for particular diets.
2. Check the tray and be sure that:
  - A. All eating utensils are available.
  - B. Food matches the diet: meat chopped, food pureed, low fats, etc.
  - C. No salt packets are served on low salt diet.
  - D. No sugar packets are served to diabetics.
  - E. No sugar substitutes are served on calorie restricted or weight reducing diets.
3. Check the name on the tray with the name on the patient's identification tag. Be aware that some patients respond to any name.
4. Place the tray on the over-the bed table. Remove the food cover and place the main dish closest to the patient. Be aware that adult bibs are available.
5. Allow patients to do as much as possible to help themselves. Assist with cutting meat, pouring liquids, or buttering breads, if needed.
6. Encourage a person to eat and check to see that it is done.

## NUTRITIONAL COMPETENCY TEST

Use these words to fill in the blanks below.

**PROTEINS  
FATS  
MINERALS**

**CARBOHYDRATES  
VITAMINS  
WATER**

1. \_\_\_\_\_ consists of calcium, iron, copper, and potassium.
2. \_\_\_\_\_ is essential to life.
3. \_\_\_\_\_ are found in meat and poultry.
4. \_\_\_\_\_ are found in butter, nuts, egg yolk, and cheese
5. \_\_\_\_\_ help body function and fight disease.
6. \_\_\_\_\_ provide heat and energy with roughage to help bowel movement.

Identify the type of diet.

**REGULAR  
LOW SALT  
LOW FAT**

**CLEAR LIQUID  
CALORIE CONTROLLED  
LOW CHOLESTEROL  
PUREE, SOFT**

**FULL LIQUID  
BLAND  
HIGH PROTEIN**

- |   |       |
|---|-------|
| 1. A diet of ice cream, custard, etc.                                     | _____ |
| 2. A diet for people with hypertension, kidney disease and heart failure. | _____ |
| 3. A diet that restricts whole milk, some meats, and egg yolks.           | _____ |
| 4. A diet of broth, ginger ale, and gelatin.                              | _____ |
| 5. Food texture is changed to make chewing easier.                        | _____ |
| 6. A diet for people with ulcers or colitis.                              | _____ |
| 7. A diet that limits fried food, desserts, and gravies.                  | _____ |
| 8. A well-balanced diet from the four food groups.                        | _____ |
| 9. A diet that helps repair tissue damaged by disease and skin breakdown. | _____ |
| 10. A diet for those trying to reduce or gain weight.                     | _____ |

**List the four food groups and an example of food from each one.**

<b>NAME</b>	<b>FOOD EXAMPLE</b>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

**Answer true or false to the following statements.**

1. Always cut the patient's meat and butter the bread. \_\_\_\_\_
2. No sugar packets are served to diabetics. \_\_\_\_\_
3. The only eating utensil a patient needs is a spoon. \_\_\_\_\_
4. The name on the tray should match the patient's identification tag. \_\_\_\_\_
5. Sugar substitutes are fine on a calorie restricted diet. \_\_\_\_\_

# MEDICAL TERMINOLOGY

## MEDICAL TERMINOLOGY

The field of medicine has its own language that is called medical terminology. Medical words are built on common word forms called roots, prefixes, and suffixes.

**ROOTS**                    The root or base part of a word identifies the medical condition that is being treated. Most root words come from Greek and Latin languages.

**PREFIXES**                A prefix is something added to the beginning of a word to change its meaning.

**SUFFIXES**                A suffix is something added to the end of a word to change or add to its meaning.

Sometimes people get prefixes and suffixes confused. It is easy to remember their difference because PRE means before. A prefix comes BEFORE the root part of a word.

Combining roots with prefixes or suffixes make medical words. For example, the root word card or cardio means heart. The suffix ology means the study of. The word cardiology means the study of the heart.

A medical form can be placed in different parts of a word and still have the same meaning, whether it is a root, prefix, or suffix. Cyte means cell and it will always refer to a cell regardless of its placement in a word.

<u>leukocyte</u>	- a white blood cell
<u>cytology</u>	- the study of cells
<u>polycytosis</u>	- illness where there are too many red and white blood cells

The next few pages list some common roots, prefixes, and suffixes. Learn them to better understand the meaning of medical terms.

<b>CEREBR</b>	- brain	<b>MAMMO</b>	- breast
<b>DERMA</b>	- skin	<b>NEUR</b>	- nerve
<b>GASTRO</b>	- stomach	<b>OCUL</b>	- eye
<b>HERMA</b>	- blood	<b>OSTE</b>	- bone
<b>HYSTER</b>	- uterus	<b>THORAC</b>	- chest
<b>GYNEC</b>	- woman	<b>PED</b>	- child

## **PREFIXES**

<b>A</b>	<b>- without</b>
<b>AB</b>	<b>- away from</b>
<b>ANTE</b>	<b>- before</b>
<b>BIO</b>	<b>- life</b>
<b>HYPER</b>	<b>- above</b>
<b>INTRA</b>	<b>- within</b>
<b>POLY</b>	<b>- many</b>
<b>PRE</b>	<b>- before</b>
<b>ANTI</b>	<b>- against</b>
<b>HYP0</b>	<b>- low</b>

## **SUFFIXES**

<b>ECTOMY</b>	<b>- to cut out</b>
<b>ITIS</b>	<b>- inflammation</b>
<b>LOGY</b>	<b>- the study of</b>
<b>OMA</b>	<b>- new growth</b>
<b>OSTOMY</b>	<b>- make an opening</b>
<b>PATHY</b>	<b>- disease</b>
<b>PLEGIA</b>	<b>- paralysis</b>
<b>SPASM</b>	<b>- contractions</b>
<b>THERAPY</b>	<b>- treatment</b>
<b>STASIS</b>	<b>- maintain a constant level</b>

The sentences below show how some prefixes and suffixes help in understanding medical words.

- 1. Poly means many. Uria means urine. Polyuria means too much urine.**
- 2. Myo means muscle. Spasm means contraction. Myospasm is a spasm of the muscle.**
- 3. Broncho means bronchus. Scopy means to look inside. Bronchoscope is an instrument to look into the bronchial tubes.**
- 4. Neuri means a nerve. Itis means inflammation. Neuritis is inflammation of the nerves.**
- 5. Arthr means joint. Itis means inflammation. Arthritis is inflammation of the joints,**
- 6. Ab means away from. The word abnormal means away from the normal.**

6. **Ab** means away from. The word **abnormal** means away from the normal.
7. **Crani** refers to the skull. **Otomy** is incision. **Craniotomy** is an opening of the skulls.
8. **Thorac** is chest. **Thoaracotomy** is an opening of the chest.
9. **Gynec** means woman. **Ology** is study. **Gynecology** is the study of the reproductive organs in women.
10. **Ped** is child. **Pediatric** pertains to diseases of children.

### ABBREVIATIONS

Study the following abbreviations.

<b>A.C.</b>	- before meals	<b>P.C.</b>	- after meals
<b>ADL</b>	- activities of daily living	<b>amb.</b>	- ambulatory
<b>ASAP</b>	- as soon as possible	<b>BID</b>	- twice a day
<b>BP</b>	- blood pressure	<b>BM</b>	- bowel movement
<b>BRP</b>	- bathroom privileges	<b>C</b>	- with
<b>c/o</b>	- complains of	<b>CC</b>	- cubic centimeters
<b>I.V.</b>	- intravenous	<b>noc.</b>	- night
<b>O. T.</b>	- occupational therapy	<b>P. T.</b>	- physical therapy
<b>SOB</b>	- shortness of breath	<b>STAT</b>	- immediately
<b>TPR</b>	- temperature, pulse, respiration	<b>w/c</b>	- wheel chair

Write the abbreviation for the underlined word/s in the following statements.

1. Medication is taken before meals. \_\_\_\_\_
2. The medication is taken with juice. \_\_\_\_\_
3. The patient's blood pressure is too high. \_\_\_\_\_
4. Send a doctor to the emergency room immediately. \_\_\_\_\_
5. CNAs bring patients to occupational therapy. \_\_\_\_\_
6. Record 400 cubic centimeters on the patient's chart. \_\_\_\_\_
7. The patient was given an intravenous through the vein. \_\_\_\_\_
8. Temperature, pulse, respiration. \_\_\_\_\_
9. The sick child complained of stomach pain. \_\_\_\_\_
10. Tylenol is taken twice a day. \_\_\_\_\_

Match these words with the statements below.

SPASMODIC  
NEURITIS  
POLYURIA

CRANIOTOMY  
BRONCHITIS  
INTRA CARDIAC  
HYPERThERMIA

THERAPY  
ARTHRITIS  
HYPOTHERMIA

1. Inflammation of body joints \_\_\_\_\_
2. An opening in the skull \_\_\_\_\_
3. Inflammation of the nerves \_\_\_\_\_
4. A spasm \_\_\_\_\_
5. Low body temperature \_\_\_\_\_
6. Within the heart \_\_\_\_\_
7. Too much urine \_\_\_\_\_
8. High body temperature \_\_\_\_\_
9. Inflammation of the bronchial tube \_\_\_\_\_
10. Radiation treatment is unnecessary \_\_\_\_\_

# BATHING

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## **BATHING**

**Bathing is as important to the sick as it is to persons who are well. Besides removing dirt and perspiration, bathing helps patients relax, feel refreshed, and do mild exercise. Bathing includes a complete or partial bath. Patients are bathed in bed while others are permitted a full bath or shower. This chapter concentrates on the bed bath.**

### **GENERAL SUGGESTIONS**

**Be aware that bathing is an excellent time to check the patient's skin condition. Let patients assist you as much as possible. Make a mitten of the wash cloth. Fill the wash basin two-thirds full with water at 105° F. Change the water whenever it becomes cool. To keep the patient warm, uncover only one part of the body at a time. Wash, rinse, and dry each body part, then cover it to provide privacy.**

### **EQUIPMENT**

**Some materials needed for a bed bath are the following: disposable gloves, bed linen, bath blanket, laundry bag, bath basin, soap and soap dish, wash cloth, face towel, bath towel, bed clothes, lotion, and powder.**

### **PREPARATIONS**

**Check the room temperature to prevent chilling. Provide privacy by drawing the curtains or closing a door. Remove the spread and blanket. Place the bath blanket over the top sheet and remove the sheet by sliding it out from under the bath blanket. Leave one pillow under the patient's head and place the other one on the chair. Remove night wear. Make sure the bath blanket covers the person.**

### **BED BATH PROCESS**

- 1. Place the towel across the patient's chest. Wash the face, neck, and ears first. Wash eyes, wiping from the inside to the outside corners. Use soap only if desired by the patient. Never keep the soap in water. Use a towel to dry washed areas.**

- 2. Expose the patient's far arm. Protect the bed by placing a bath towel underneath the arm. Hold the arm above the wrist. Wash the shoulder, armpit, arm, and hand. Rinse and dry. Bathe the other arm in the same way. Apply deodorant and powder if the patient wishes it.**
- 3. Place the bath towel over the patient's chest and fold the bath blanket to the waist. Wash, rinse, and dry the chest area under the towel, being careful of folds under a woman's breast.**
- 4. Fold the bath blanket down to the pubic area and wash, rinse, and dry the abdomen and navel areas. When finished, cover the abdomen and chest with the bath blanket and slide the towel out from under it.**
- 5. Expose the thigh, leg, and foot. Place the towel lengthwise under the leg to protect the bed. Put the basin on the towel, and if possible, place the resident's foot in the basin. Wash and rinse the leg and foot, especially between the toes. Dry them well. Do the other leg in the same manner.**
- 6. It may be necessary to change the water if it becomes too cold or soapy.**
- 7. Have the patient turn to the side, toward the center of the bed, placing the towel lengthwise next to the patient's back. Wash, rinse, and dry the neck back and forth, using long, firm strokes. Apply lotion or give a back rub.**
- 8. Turn the patient on his or her back, placing a towel under the buttocks. If the patient can wash his or her own genitals, place the bathing equipment within easy reach. If not, wear disposable gloves and wash the patient.**

### **FINISHING TOUCH TO A BATH**

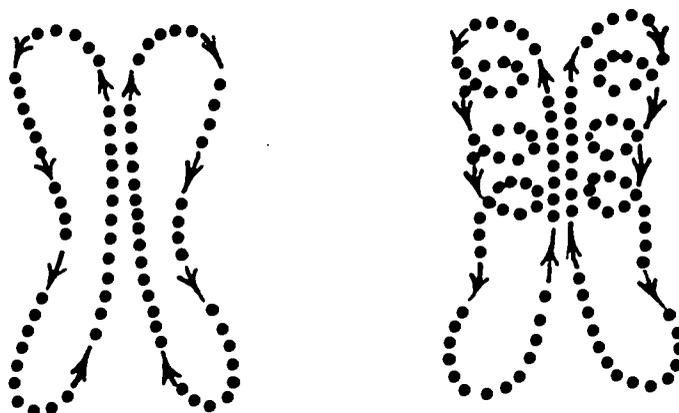
- 1. Rub lotion on areas that are dry, reddened, or irritated.**
- 2. Put clean bed clothes on the patient.**
- 3. Let the person comb his or her own hair, assisting if necessary. Women may wish to wear makeup.**
- 4. Clean all equipment and return the articles to their proper place.**
- 5. Make the bed, adjust side rails if needed, and straighten table, making sure it is clean and free of dust.**
- 6. Put soiled linens in the appropriate place.**
- 7. The CNA should finish the task by washing one's hands.**

## GIVING A BACK RUB

The equipment for giving a back rub consists of a basin of water (105° F), a bath towel, soap, alcohol or lotion, and body powder.

Like all tasks, the CNAs begin by washing their hands. Raise the bed to a comfortable height. (The bed rail remains up on the opposite side of where the CNA works.) The patient is turned to one side, with his or her back facing the CNA, exposing the back and upper buttocks. The remainder of the body is covered.

Wash and dry the patient's back. The CNA then pours a small amount of lotion on his or her hands, rubbing them together to warm them. Apply the lotion to the skin of the patient with long, smoothing strokes. This stimulates circulation.



Begin at the base of the spine, go up to the center of the back, around the shoulders, and down the side of the back and buttocks about four times. On the downward stroke, rub by using a small circular motion with the palm of the hand.

A back rub usually lasts about 3-5 minutes. When finished, removed any excess lotion and dry the back carefully. The final steps are to straighten the bedding and the patient's clothing. Assist the patient into a comfortable position. The CNA completes the tasks by washing his or her hands

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **DISPOSABLE** - designed to be thrown away  
Wear disposable gloves to bath a patient.
2. **BUTTOCKS** - two fleshy parts at the lower back body trunk  
Place a towel under the buttocks when giving a bath.
3. **CIRCULAR** - moving in the form of a circle  
Rub the back by using a small circular motion.
4. **PRIVACY** - away from the notice of others  
Cover the body to protect privacy.
5. **GENITALS** - the outside reproductive organs  
The patient can wash the genital area.
6. **PARTIAL** - only a part, not total  
Bathing includes a complete or a partial bath.
7. **DEODORANT** - a skin lotion to stop unwanted odors  
Apply deodorant under the arms.
8. **APPROPRIATE** - proper, correct  
Put soiled linens in the appropriate place.
9. **PERSPIRATION** - fluid discharge through pores in the skin  
A bath removes perspiration from the body.
10. **EXPOSE** - show, make visible  
The upper bottock is exposed when giving a bath.

## BATHING COMPETENCY TEST

Circle the letter that is the BEST answer to each statement below.

1. Soiled linens should be placed
  - a. on the floor.
  - b. in a covered linen container.
  - c. in a labeled bag.
  - d. on the patient's chair.
  
2. A back rub provides
  - a. relaxation.
  - b. a good time to talk.
  - c. good skin condition.
  - d. cleanliness.
  
3. Bath water temperature should be
  - a. 105°
  - b. 90°
  - c. 100°
  - d. 115°
  
4. The best way to warm lotion before applying it is to
  - a. shake the lotion bottle.
  - b. raise room temperature.
  - c. pour lotion on hands and rub them together.
  - d. none of the above.
  
5. The first step to prepare a resident for a bath is to
  - a. test the water temperature.
  - b. help the patient undress.
  - c. close the door and window.
  - d. check for privacy.

6. When giving a bed bath, work from
- a. head to toe.
  - b. toe to head.
  - c. middle to head.
  - d. middle to feet.
7. One piece of equipment that is NOT part of the bathing process is
- a. towel.
  - b. thermometer.
  - c. soap.
  - d. wash cloth.
8. The task that is NOT part of the finishing touches to a bath is
- a. distribute medications.
  - b. put soiled linens in the proper place.
  - c. apply lotion.
  - d. apply makeup.

Answer true or false to the following statements.

- 1. Bathing can provide the patient with mild exercise. \_\_\_\_\_
- 2. In a bed bath, only the part being washed should be exposed. \_\_\_\_\_
- 3. Bathing is done only on days a patient has visitors. \_\_\_\_\_
- 4. When giving a bed bath, expose the whole body at once. \_\_\_\_\_
- 5. Change bath water when it becomes too soapy. \_\_\_\_\_
- 6. During a bed bath, both side rails should be down. \_\_\_\_\_
- 7. Soap may be left in the basin of water to soften. \_\_\_\_\_
- 8. The patient should help with the bath process whenever possible. \_\_\_\_\_

# VITAL SIGNS

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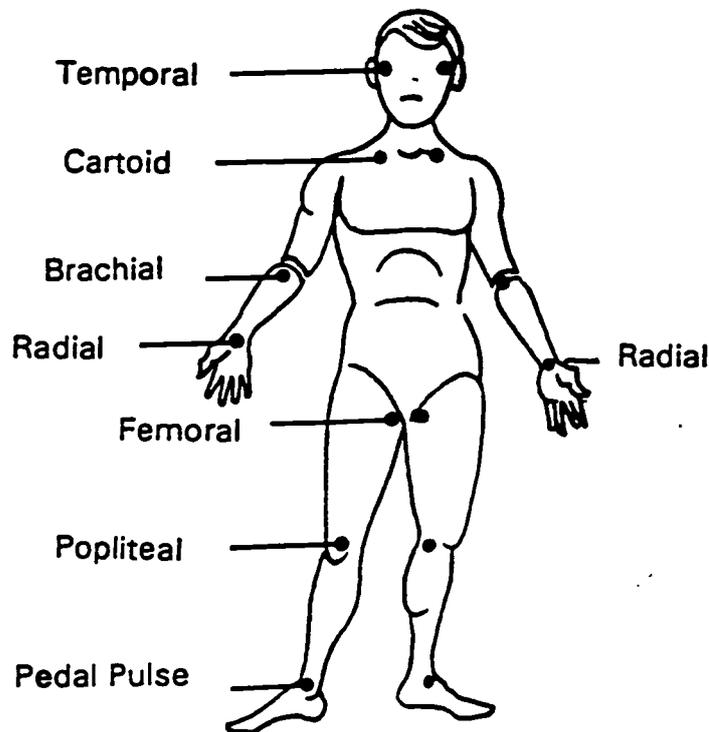
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The vital signs covered in this chapter are radial pulse, respiration, temperature, and blood pressure. These signs measure the working condition of living organs in the body. A patient's health is evaluated when these signs are measured. They are extremely important because medical care is dependent on these signals.

Special equipment is used to measure vital signs. Although some health facilities use electronic equipment to measure vital signs, it is important to know some basic facts about vital signs.

## RADIAL PULSE

Pulse is the regular throbbing of the arteries caused by contractions of the heart. Pulse is the pressure of the blood against the artery wall as the heart beats and relaxes. Although the pressure is the same in all arteries of the body, the pulse is often counted in the radial artery. Should the patient be unconscious, however, the pulse is taken in the carotid artery. The picture below shows the location of these arteries.



**When taking a pulse, notice the rate and rhythm. The rate is the number of beats per minute. The normal pulse rate in adult men is 60-70 beats per minute (bpm) and in adult women 65-80 beats per minute.**

**Rhythm is the regular or irregular patterns of beats. Normal rhythm has smooth, equal time spaces between beats. If the time between each beat is not equal, the rhythm is irregular.**

**Pulse increases with age, temperature, exercise, pain, illness, emotional upset, and certain heart conditions. Pulse decreases with an increase in blood pressure, some drugs, rest, and certain heart conditions.**

## **RESPIRATION**

**Respiration is the process of breathing and is measured by watching a resident breath in and out. The function of respiration is to rid the body of excess carbon dioxide (exhale) and supply the body with oxygen (inhale). Respiration, like pulse reading, is checked for rate and rhythm. The rate is determined by counting the rise or fall of the chest for one minute with a watch that has a second hand. The normal rate for adults is 12-24 beats per minute.**

**There are words that describe the quality of respiration. They are:**

**deep or shallow  
loud or quiet  
easy or difficult  
and regular or irregular**

**It is difficult for patients to breath normally if they know their respiration is being taken. Therefore, the respiration rate is done while the patient is unaware of it. It is usually taken immediately after the pulse rate. The CNA keeps his or her hand on the patient's radial artery and watches the patient's chest go up and down.**

## TEMPERATURE

Temperature is the degree of heat in the body. Heat is produced by chemical reactions and muscular contractions. Blood carries the heat to the skin where it passes to the outside of the body through perspiration. Temperature measures the balance between heat produced and heat lost through evaporation.

There are three methods of measuring body temperature: oral, rectal, and axillary. The patient's condition determines which one is used. The most common method is the oral. Rectal temperature is the most accurate. The doctor orders a rectal temperature. When the mouth or rectal areas cannot be done, the axillary or groin area is used.

Temperature degrees are expressed by an F for Fahrenheit or C for Celsius. A small ° after the letter means the degree of temperature.

**EXAMPLE: 98.6° F or 37° C**

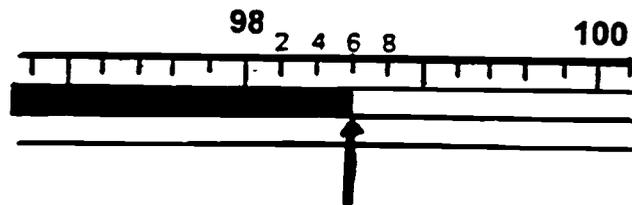
	<b>AVERAGE TEMPERATURE</b>		<b>READING SPAN</b>
<b>ORAL</b>	<b>98.6° F</b>	<b>98.6° F</b>	<b>- 99.6° F</b>
<b>AXILLARY</b>	<b>97.6° F</b>	<b>96.6° F</b>	<b>- 98.6° F</b>
<b>RECTAL</b>	<b>99.6° F</b>	<b>98.6° F</b>	<b>- 100.6° F</b>

Below normal temperatures are caused by burns, strokes, excessive bleeding, shock, and cold drinks.

Above normal temperatures occur from infections, emotional upset, ovulation, acute pain, and hot drinks.

## READING A THERMOMETER

A thermometer is easy to read. The lines between each whole number count for two degrees. If there are three lines after the number 98, the temperature is read 98.6°, as shown in the following illustration.



## BLOOD PRESSURE

Blood pressure is the amount of force caused by blood going through the arteries while the heart is pumping. Factors that influence blood pressure are many:

- amount of blood
- condition and force of the heartbeat
- distance of the blood from the heart
- sex of the individual
- amount of exercise performed
- eating habits, obesity, fasting
- emotions
- diseases and pain
- heredity
- rest
- weight

Factors that increase pressure are hardening of the arteries, stroke, cerebral vascular accident, kidney disease, emotional change, obesity, and age. Factors that decrease pressure are anemia, shock, hemorrhage, and Addison's disease.

<b>EXAMPLE</b>	<u>120</u> 80	<u>90</u> 60	<u>150</u> 90
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The higher number is called the **SYSTOLIC PRESSURE**. This represents the amount of pressure in the arteries when the heart is at work pumping blood through the body. The lower number is the **DIASTOLIC PRESSURE**. This is equal to the amount of pressure in the arteries when the heart is at rest.

<u>120</u>	<b>SYSTOLIC</b>	-	pressure when the heart is pumping blood.
80	<b>DIASTOLIC</b>	-	pressure when the heart is at rest.

### NORMAL BLOOD PRESSURE READINGS

<b>NORMAL</b>	<u>120</u> 80	<b>AGE 50</b>	<u>130</u> 86	<b>AGE 65</b>	<u>135</u> 87
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<b>HYPERTENSION</b>	-	high blood pressure	<u>140</u> 90	<u>150</u> 90
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<b>HYPOTENSION</b>	-	low blood pressure	<u>90</u> 60	<u>100</u> 60
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## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **ARTERY** - vessel that carries blood to the heart  
The pulse is often counted in the radial artery.
2. **UNCONSCIOUS** - lacking awareness  
If a patient is unconscious, the pulse is taken in the carotid artery.
3. **IRREGULAR** - not steady  
Rhythm is the regular or irregular pattern of the heart beat.
4. **RESPIRATION** - process of breathing  
Respiration may be described as deep or shallow.
5. **TEMPERATURE** - heat of the body  
The normal body temperature is 98.6 degrees.
6. **DECREASE** - lessen  
The pulse decreases with certain heart conditions.
7. **VITAL SIGNS** - temperature, pulse, respiration, and blood pressure  
A patient's health is evaluated by vital signs.
8. **THERMOMETER** - instrument to measure body heat.  
Health facilities have electronic thermometers.
9. **SYSTOLIC** - pressure when the heart is pumping blood  
 $\frac{120}{80}$  Systolic number of an improper fraction.
10. **DIASTOLIC** - pressure when the heart is at rest  
 $\frac{120}{80}$  Diastolic number of an improper fraction.

## VITAL SIGNS COMPETENCY TEST

Match the word that goes BEST with the statements below.

**RESPIRATION  
PRESSURE**

**TEMPERATURE  
PULSE**

1. radial or cartoid artery
2. measure of heat produced and lost
3. systolic, diastolic
4. deep and shallow breathing
5. oral, axillary, rectal
6. regular, irregular patterns of beats
7. inhale, exhale
8. hypotension, hypertension
9. bpm
10. 98.6 degrees

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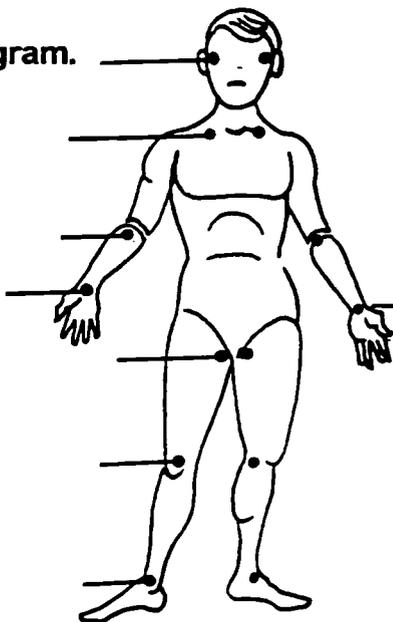
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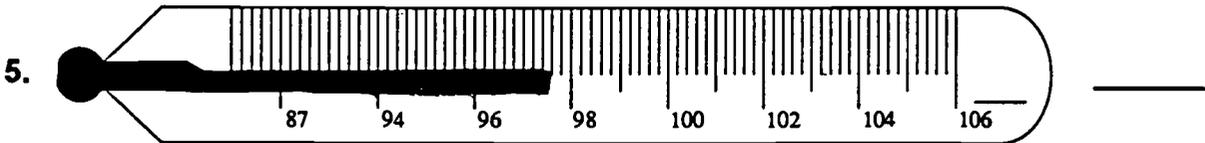
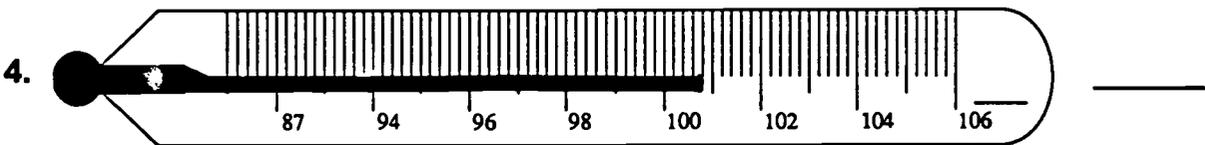
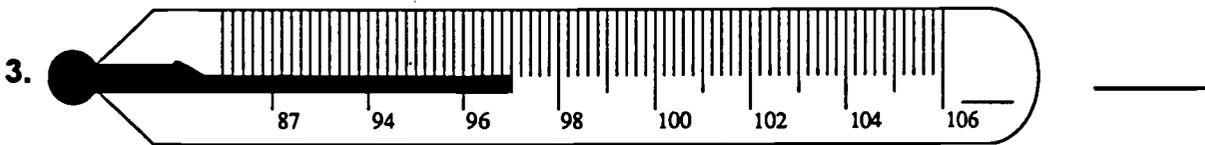
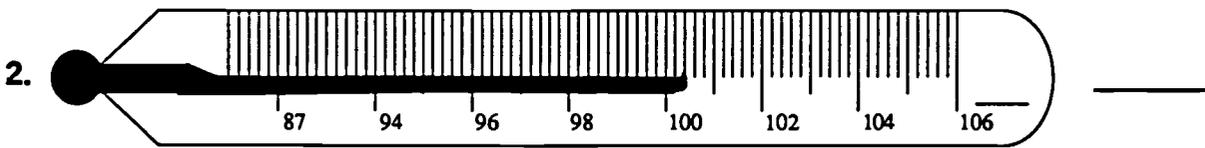
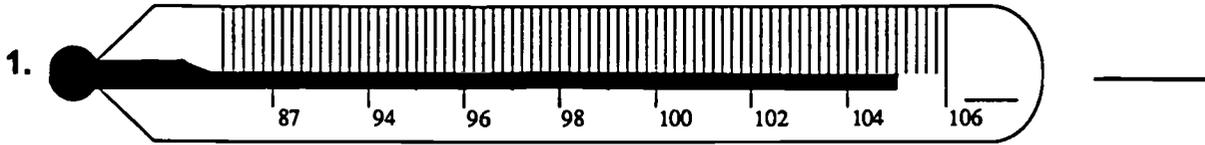
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Circle the radial artery in this diagram.

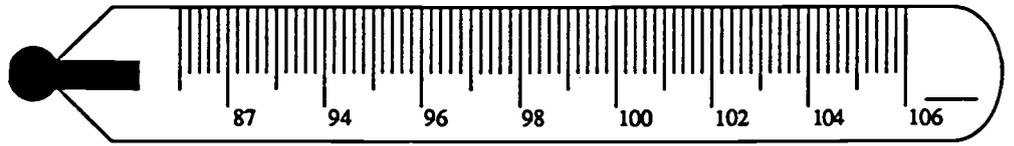


Write the temperatures in the following thermometers on the line provided.

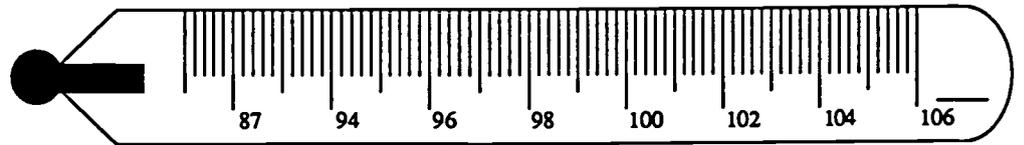


Draw a line in the thermometer to show the following temperatures.

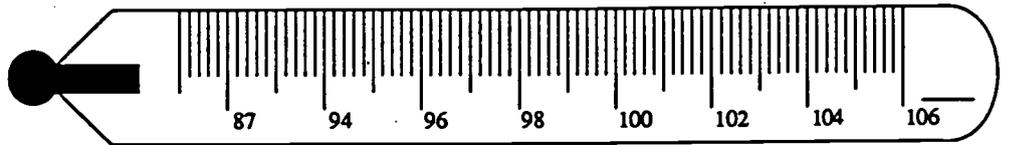
1. 97.8



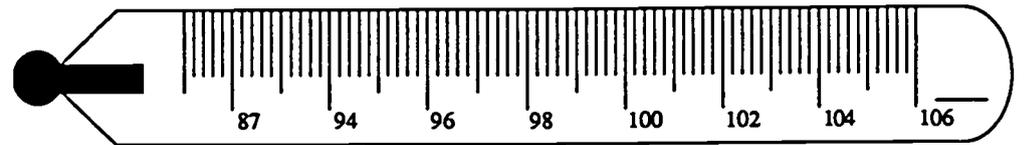
2. 101.6



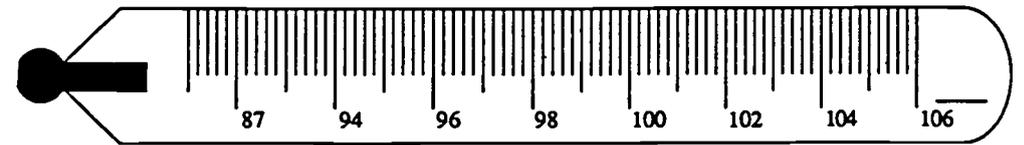
3. 98.4



4. 103.2



5. 102



**FLUID INTAKE AND OUTPUT**  
**DEATH AND DYING**

## **FLUID INTAKE AND OUTPUT**

**Fluids, or the liquids in the body, are elements necessary for life. Fluid intake is as important to life as eating. Water is the most common and plentiful fluid and makes up about two-thirds (60%) of body weight. Other fluids consist of juices, milk, tea, coffee, soda, and anything drinkable. Next to oxygen, water is the most important need of the body. If one fifth (20%) of total body fluids is lost, death can result.**

**Several important functions in the body are regulated by fluids. They soften and lubricate foods and aid in digestion. Fluids transport food and oxygen throughout the body in the blood. They remove waste from cells and carry it to the lungs, kidneys, and bowels. The skin, throat, and eyeballs are lubricated with fluids. Temperature is also regulated by liquids.**

## **FLUID IMBALANCES**

**Whether a person is sick or healthy, there must be a proper balance in the amount of fluids taken into the body and the amount of fluid lost under normal conditions. Usually this condition takes care of itself, but there are imbalances at times.**

### **DEHYDRATION**

**A lack of sufficient water or fluids in the body is called dehydration.**

### **EDEMA**

**The other extreme is too much fluid in the tissues. This is called edema.**

**Although both conditions are emergency situations, they can be corrected with proper treatment. The chart on the following page shows the symptoms, causes, and cures for dehydration and edema. Study the chart carefully.**

## DEHYDRATION

### CAUSES

- . Perspires from fever
- . Drinks less fluids
- . Uses too much salt
- . Some medications
- . Vomiting, diarrhea, asthma
- . Certain diseases like strokes where patients are immobile

### SYMPTOMS

- . Mouth and throat become dry
- . Tongue is thick and coated
- . Skin is hard and cracks
- . Blood and urine decrease
- . Weight drops
- . Constipation occurs

### PREVENTION

- . Keep fresh water at bedside at all times
- . Offer patient a drink often
- . Encourage patient to drink liquids from tray
- . Find out patients preferred drinks

## EDEMA

### CAUSES

- . Heart inefficiencies
- . Some kidney diseases
- . High salt intake
- . Infection, injuries, burns
- . Staying in one position too long
- . IV's where fluids go into tissues instead of vein

### SYMPTOMS

- . Swelling
- . Shortness of breath
- . Weight increase
- . Urine decreases

### PREVENTION

- . Avoid tight shoes or restricting clothes
- . Elevate feet when sitting
- . Place pillow under legs and feet
- . Remove constricting rings or jewelry

## DEATH AND DYING

Dying is the final stage of the life process. Death is a natural ending of life because everyone is born to die. Each individual handles death differently, depending on personal experiences. These experiences have a strong effect on the way one reacts to death. Therefore, it is important to look at attitudes regarding death in order to honestly acknowledge them for what they are.

### ATTITUDES REGARDING DEATH

<b>FEAR</b>	Death is a mystery that cannot be fully understood. The unknown is an uncomfortable, fearful experience.
<b>AWARENESS OF ONE'S IMMORTALITY</b>	Witnessing the death of another reminds us that someday we too will die. It is hard to imagine not living.
<b>GUILT</b>	People who care for the sick may feel that if they did more, the person would have lived longer. This feeling comes even when there is nothing more that can be done.
<b>SADNESS</b>	A great sense of loss is felt at the death of a person once cared for who is no longer part of the CNA's life.
<b>GLADNESS AND RELIEF</b>	Joy and relief are also experienced at death because the one who suffered is free of pain.
<b>UNRESOLVED DEATH EXPERIENCES</b>	To care for a dying person may resurface past feelings and experiences at the death of family member or friend. If these feelings go unresolved, they can interfere with the present care of a dying patient.

Attitudes about death influence the CNA's ability to work with the dying. Accepting death as a natural part of life and honestly acknowledging personal feelings about death enable one to assist dying persons in a more realistic, human manner.

### STAGES OF GRIEF

Patients facing death pass through many emotional and psychological stages before they can accept the reality of their own death. Dr. Elizabeth Kubler-Ross identifies five stages of the grieving process. A chart follows that describes the five stages of grief, ways in which a patient may react, and how a CNA might respond.

STAGES	PATIENT'S RESPONSE	CNA'S RESPONSE
<p><b>DENIAL</b> Patient is angry and aware of approaching death.</p>	<ul style="list-style-type: none"> <li>. Shock, "It's not true, not me."</li> <li>. "I refuses to talk about it."</li> <li>. "Lab tests can't be right."</li> </ul>	<ul style="list-style-type: none"> <li>. Listen</li> <li>. Allow patient to express feelings</li> <li>. Try not to confirm or deny fact.</li> </ul>
<p><b>ANGER</b> Patient is no longer able to deny the fact.</p>	<ul style="list-style-type: none"> <li>. Tries to fight the hurt.</li> <li>. Constant complaining.</li> <li>. "The doctor blew it."</li> </ul>	<ul style="list-style-type: none"> <li>. Understand the source of pain.</li> <li>. Support and listen.</li> <li>. Meet reasonable needs and demands quickly.</li> </ul>
<p><b>BARGAINING</b> Patient attempts to bargain for more time to live.</p>	<ul style="list-style-type: none"> <li>. Bargains with God and others.</li> <li>. Tries to postpone feelings.</li> <li>. "I want to live three more months."</li> <li>. "If God spares me, I'll go back to church."</li> </ul>	<ul style="list-style-type: none"> <li>. Meet patient's request, if possible.</li> <li>. Listen attentively.</li> <li>. Ask if patient wishes help from clergy.</li> </ul>
<p><b>DEPRESSION</b> Patient is sad by loss of family and unaccomplished goals.</p>	<ul style="list-style-type: none"> <li>. Realize death is soon.</li> <li>. Loses interest in everything.</li> <li>. Has saddened look.</li> </ul>	<ul style="list-style-type: none"> <li>. Let patient know it's OK to be sad.</li> <li>. Patient's needs must be heard.</li> <li>. Provide good physical care.</li> </ul>
<p><b>ACCEPTANCE</b> Patient accepts reality of death.</p>	<ul style="list-style-type: none"> <li>. Understands and accepts.</li> <li>. Does very little talking.</li> <li>. Completes unfinished business.</li> </ul>	<ul style="list-style-type: none"> <li>. Hold patient's hand.</li> <li>. Be there for loving support.</li> <li>. Provide physical comfort.</li> </ul>

## VOCABULARY STUDY SHEET

Study the following vocabulary words.

1. **DEHYDRATION** - loss of water or moisture  
A lack of water or fluids in the body is called dehydration.
2. **EDEMA** - excessive fluid in the tissues  
Edema is the extreme of too much fluid in the tissues
3. **IMBALANCE** - not equal  
At times, there are imbalances in the amount of fluids in the body.
4. **SYMPTOMS** - feature, indication, characteristic  
One of the symptoms of edema is swelling and shortness of breath.
5. **CAUSE** - reason for something to happen  
Vomiting, diarrhea, and asthma could cause dehydration.
6. **ATTITUDE** - outlook, viewpoint  
Attitude about death influences one's ability to work with the dying.
7. **DENIAL** - refuse to believe  
The first stage in the grieving process is denial.
8. **DEPRESSION** - despair, sadness  
The patient is depressed over the news about her health condition.
9. **INFLUENCE** - power to sway or affect events or actions  
Attitudes about death influence the way a CNA cares for patients.
10. **UNRESOLVED** - unfinished, unsettled  
Unresolved feeling about death interfere with care for the dying person.

## FLUID INTAKE - DEATH AND DYING COMPETENCY TEST

Circle the letter that gives the BEST answer to each statement.

1. Fluids in the body

- a. lubricate food to aid digestion.
- b. regulate temperature.
- c. remove waste from cells to kidneys.
- d. all of the above.

2. A terminally ill patient who constantly complains is in the stage of

- a. acceptance.
- b. anger.
- c. bargaining.
- d. denial.

3. A statement showing a patient is denying death is

- a. I want another test done.
- b. I'm so angry
- b. This isn't happening to me.
- d. I don't get good care here.

4. A helpful way for CNAs to assist dying patients is to

- a. Get help from the supervisor.
- b. Get an RN degree soon.
- c. Face one's own attitude on death.
- d. Attend a lot of wakes and funerals.

5. Write either the word DEHYDRATION or EDEMA with the statements below.

mouth and throat become dry  
shortness of breath  
staying in one position too long  
skin is hard and cracks  
infection, injuries, burns  
avoid tight clothing

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6. Write the five stages of grief in their correct order. (anger, acceptance, bargaining, denial, and depression)

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## NURSES' AIDE JOB-RELATED CHECKLIST

TOPICS	DATE	SCORE
THE ROLE OF THE CNA	_____	_____
INFECTION CONTROL	_____	_____
ETHICAL-LEGAL ISSUES PATIENTS' BILL OF RIGHTS	_____	_____
SAFETY PRECAUTIONS	_____	_____
NUTRITION	_____	_____
MEDICAL TERMINOLOGY	_____	_____
BATHING	_____	_____
VITAL SIGNS	_____	_____
FLUID INTAKE AND OUTPUT DEATH AND DYING	_____	_____



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