2 Foundations of Resident Care

1. Understand the importance of verbal and written communications

Effective communication is a critical part of a nursing assistant's job. Nursing assistants must communicate with supervisors, the care team, residents, and family members. A resident's health depends on how well an NA communicates observations and concerns to the nurse.

Communication is the process of exchanging information with others. It is a process of sending and receiving messages. People communicate with signs and symbols, such as words, drawings, and pictures. They also communicate through their behavior. **Verbal communication** uses spoken or written words. Oral reports are an example of verbal communication. **Nonverbal communication** is communicating without using words. An example is a person shrugging his shoulders. Nonverbal communication also includes how a person says something. Body language is another form of nonverbal communication. Movements, facial expressions, and posture can express different attitudes or emotions (Fig. 2-1).

Different Languages

NAs should speak in a language that residents can understand or find an interpreter (someone who speaks the resident's language) to help. (Family members should not be asked to interpret medical information.) Picture cards, gestures, and translation devices can aid communication. NAs should not use a different language when speaking with staff in front of residents.

Fig. 2-1. Body language sends messages just as words do. Which of these people seems more interested in their conversation—the person on the right who is looking down with her arms crossed or the person on the left who is sitting up straight and smiling?

Nursing assistants must make brief, accurate oral and written reports to residents and staff. Careful observations are used to make these reports and are important to the health and well-being of all residents. Signs and symptoms that should be reported will be discussed throughout this textbook. Some observations will need to be reported immediately to the nurse. Deciding what to report immediately involves critical thinking. Anything that endangers residents should be reported immediately, including the following:

- Falls
- Chest pain
- Severe headache
- Trouble breathing
- Abnormal pulse rate, respiratory rate, or blood pressure reading
- Change in mental status
- Sudden weakness or loss of mobility

- Fever
- Loss of consciousness
- Change in level of consciousness
- Bleeding
- Swelling of a body part
- Change in resident's condition
- Bruises, abrasions, or other signs of possible abuse

When making reports about residents, NAs must remember that all resident information is confidential. Information should only be shared with the care team.

When residents report symptoms, events, or feelings, the NA should have them repeat what they have said. He should ask for more information. The NA should ask open-ended questions that need more than a "yes" or "no" answer. For example, an NA should not ask, "Did you sleep well last night?" Instead, he should ask, "Can you tell me about your night and how you slept?" This will encourage the resident to offer facts and details.

Proper Communication

When communicating with residents, the NA should remember to do the following:

- Always greet the resident by their preferred name.
- Identify herself.
- Focus on the topic to be discussed.
- Face the resident while speaking.
- Talk with the resident, not other staff members, while giving care.
- Listen and respond when the resident speaks.
- Use positive language and smile often.
- Encourage the resident to interact with her and others.
- Be courteous.
- Tell the resident when she is leaving the room.

Residents' Rights

Names and Pronouns

NAs should call residents by the names that they prefer. Residents should not be referred to by their first names unless they have asked the NA to do so. Terms such as *sweetie*, *honey*, or *dearie* are disrespectful and should not be used. In addition, NAs should use pronouns residents prefer (he/him, she/her, or they/them).

When making any report, the right information must be collected before documenting it. Facts, not opinions, are most useful to the care team. Two kinds of factual information are needed in reporting. **Objective information** is based on what a person sees, hears, touches, or smells. Objective information is collected by using the senses. It is also called *signs*. **Subjective information** is something a person cannot or did not observe. It is based on something that the resident reported that may or may not be true. It is also called *symptoms*. An example of objective information is "Mr. Hartman is holding his head and rubbing his temples." A subjective report of the same situation might be "Mr. Hartman says he has a headache." The nurse needs factual information in order to make decisions about care and treatment. Both objective and subjective reports are valuable.

In any report, what is observed (signs) and what the resident reports (symptoms) need to be clearly noted. "Ms. Scott reports pain in left shoulder" is an example of clear reporting. NAs are not expected to make diagnoses based on signs they observe. Their observations, however, can alert the care team to possible problems. In order to report accurately, NAs must observe residents accurately. To observe accurately, as many senses as possible should be used to gather information (Fig. 2-2).

Sight. The NA should look for changes in the resident's appearance. These include rashes, redness, paleness, swelling, discharge, weakness, sunken eyes, and posture or gait (walking) changes.

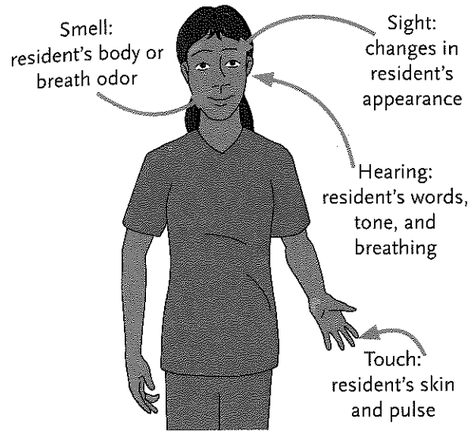

Fig. 2-2. Reporting observations accurately requires using more than one sense.

Hearing. The NA should listen to what the resident says about their condition, family, or needs. Is the resident speaking clearly and making sense? Do they show emotions, such as anger, frustration, or sadness? Is their breathing normal? Do they wheeze, gasp, or cough? Is the area quiet enough for the resident to rest?

Touch. Does the resident's skin feel hot or cool, moist or dry? Is the pulse rate normal?

Smell. Are there any odors coming from the resident's body? Odors could suggest poor bathing, infections, or incontinence. **Incontinence** is the inability to control the bladder or bowels. Breath odor could suggest use of alcohol or tobacco, indigestion, or poor mouth care.

For oral reports, the NA should write notes so that important details are not forgotten (Fig. 2-3). When needing to give an oral report, unless the situation is urgent, the NA should approach the nurse and wait for the nurse to complete the task she is currently doing. Once the nurse has acknowledged the NA, she can briefly state the message and deliver the written summary (if there is one). Waiting until the nurse is done helps reduce the risk of error. Following an oral report, the NA must document when, why, about what, and to whom an oral report was given. Documentation should always occur after the report is given, not before.

Fig. 2-3. Taking notes helps nursing assistants remember facts and report accurately.

Sometimes the nurse or another member of the care team will give an NA a brief oral report on one of her residents. The NA should listen carefully and take notes. She should ask about anything she does not understand. At the end of the report, the NA can restate what she has been told to make sure she understands.

Throughout an NA's training, she will learn medical terms for specific conditions. Medical terms are often made up of roots, prefixes, and suffixes. A root is a part of a word that contains its basic meaning. The prefix is the word part that comes before the root to help form a new word. The suffix is the word part added to the end of a root that helps form a new word. Prefixes and suffixes are called *affixes* because they are attached, or affixed, to a root. Here are some examples:

- The root *derm* or *derma* means skin. The suffix *itis* means inflammation. Dermatitis is an inflammation of the skin.
- The prefix *brady* means slow. The root *cardia* means heart. Bradycardia is slow heartbeat or pulse.
- The suffix *pathy* means disease. The root *neuro* means of the nerve or nervous system. Neuropathy is a nerve disease or disease of the nervous system.

When speaking with residents and their families, NAs should use simple, nonmedical terms. Medical terms should not be used because they may not be understood. But when speaking with

the care team, using medical terminology will help give more complete information.

Abbreviations are another way to help the care team communicate more efficiently with each other. For example, the abbreviation *prn* means *as necessary*. NAs should learn the standard medical abbreviations their facility uses. They can use them to report information briefly and accurately. NAs may need to know these abbreviations to read assignments or care plans. A brief list of abbreviations is located at the end of this textbook. There may be other terms in use at a facility, so NAs should follow facility policy.

Telephone Communication

Nursing assistants may be asked to make a call or answer the telephone at their facility.

Guidelines: Telephone Communication

- Always identify your facility's name, your name, and your position. Be friendly and professional.
- If you need to find the person the caller wishes to speak with, place the caller on hold after asking if it is okay to do so.
- If the caller has to leave a message, write it down and repeat it to make sure you have the correct message. Ask for proper spellings of names. Do not ask for more information than the person needs to return the call: a name, short message, and phone number is enough. Do not give out any information about staff or residents. If someone is calling to give a doctor's order for a resident, find the nurse or take a message for the nurse.
- Thank the person for calling. Say goodbye.

Call Lights

Long-term care facilities are required to have a call system, often called *call lights*, so that residents can call for help whenever they need it. They are in resident rooms and bathrooms. Some have strings for residents to pull, and others have buttons to push. The signal is usually both a light outside the room and a sound that can be heard in the nurses' station. A call light is the primary way a resident can call for help. NAs must always respond immediately when they see the light or hear the sound. They should do so even if the resident who needs help is not on their assignment sheet. All residents are the responsibility of each NA. NAs should respond to call lights in a courteous and respectful manner. They must check each time before leaving a room to make sure that the call light is within reach of the resident's stronger hand and that the resident knows how to use it.

2. Describe barriers to communication

Communication can be blocked or disrupted in many ways (Fig. 2-4). These are some barriers and ways for a nursing assistant to avoid them:

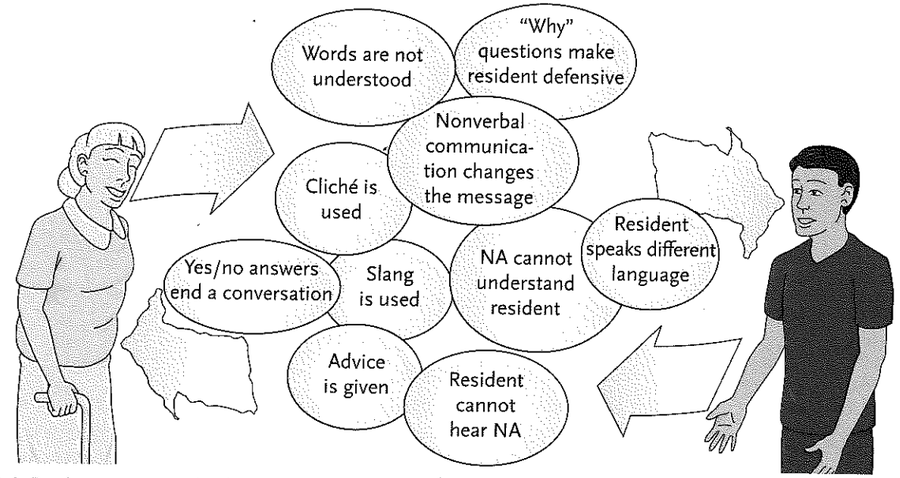

Fig. 2-4. Barriers to communication.

Resident does not hear NA, does not hear correctly, or does not understand. The NA should face the resident. He should speak slowly and clearly. He should not shout, whisper, or mumble. The NA should speak in a low voice, using a pleasant tone. If the resident wears a hearing aid, the NA should check that it is on and is working.

Resident is difficult to understand. The NA should be patient and take time to listen. He can ask the resident to repeat or explain the message. He should then state the message in his own words to make sure he has understood.

NA, resident, or others use words that are not understood. An NA should not use medical terms with residents or their families. He should speak in simple, everyday words and ask what a word means if he is not sure.

NA uses slang or profanity. The NA should avoid using slang words. They are unprofessional and may not be understood. He should not use profanity, even if the resident does.

NA uses clichés. **Clichés** are phrases that are used over and over again and do not really mean anything. For example, "Everything will be fine" is a cliché. Instead of using a cliché, the NA should listen to what a resident is really saying. He should respond with a meaningful message.

NA responds with "Why?" The NA should avoid asking "Why?" when a resident makes a statement. "Why" questions make people feel defensive.

NA gives advice. The NA should not offer his opinion or give advice. Giving medical advice is not within an NA's scope of practice. It could be dangerous.

NA asks questions that only require yes/no answers. The NA should ask open-ended questions that need more than a "yes" or "no" answer. Yes and no answers end conversation. For example, if an NA wants to know what a resident likes to eat, he should not ask, "Do you like vegetables?" Instead, he should ask, "Which vegetables do you like best?"

Resident speaks a different language. If a resident speaks a different language than the NA does, the NA should speak slowly and clearly. He should keep his messages short and simple. He should be alert for words the resident understands, as well as signs that the resident is only pretending to understand. He may need to use a communication board. If the resident prefers to communicate in her native language, an interpreter or interpretation service should be used. The NA should be patient and calm.

NA or resident uses nonverbal communication. Nonverbal communication can change a message. The NA should be aware of his body language and gestures. He can look for nonverbal messages from residents and clarify them. For example, "Mr. Feldman, you say you're feeling fine but you seem to be in pain. Can I help?"

Defense mechanisms may be considered barriers to communication. **Defense mechanisms** are unconscious behaviors used to release tension or cope with stress. They help to block uncomfortable or threatening feelings. These are some common defense mechanisms:

- **Denial**: Completely rejecting the thought or feeling—"I'm not upset with you!"
- **Projection**: Seeing feelings in others that are really one's own—"My teacher hates me."
- **Displacement**: Transferring a strong negative feeling to a safer situation—for example, an unhappy employee cannot yell at his boss for fear of losing his job. He later yells at his wife.
- **Rationalization**: Making excuses to justify a situation—for example, after stealing something, saying "Everybody does it."
- **Repression**: Blocking painful thoughts or feelings from the mind—for example, having no memory of a disturbing event.
- **Regression**: Going back to an old, usually immature behavior—for example, throwing a temper tantrum as an adult.

Culture can affect communication. A **culture** is a system of learned beliefs and behaviors that is practiced by a group of people. Each culture may have different knowledge, behaviors, beliefs, values, attitudes, religions, and customs. When an NA communicates with residents, she should ask herself these questions:

- What information do I need to communicate to this person?
- Does this person speak English as a first or second language?
- Do I speak this person's language, or do I need an interpreter?
- Does this person have any cultural practices about touch or gestures I should adapt to?

It is important for NAs to be sensitive to each resident's needs. This is key to providing professional, person-centered care. Learning each resident's behavior and preferences can be a challenge. However, it is an important part of communication. It is especially vital in a multicultural society (a society made up of many cultures), such as the United States. The NA should be aware of all the messages sent and received. Listening and observing carefully will help an NA better understand residents' needs and feelings.

3. List guidelines for communicating with residents with special needs

Due to illness or impairments, some residents need special techniques to aid communication. An **impairment** is a loss of function or ability; it can be a partial or complete loss. Special techniques for different conditions are listed below. Information about Alzheimer's disease and related communication tips is in Chapter 5.

Hearing Impairment

There are many different kinds of hearing loss. A person may be born with hearing impairment or it may happen gradually. People who have a hearing impairment may use a hearing aid, read lips, or use sign language. People with impaired hearing also closely observe the facial expressions and body language of others to add to their knowledge of what is being said.

Guidelines: Hearing Impairment

- If the person has a hearing aid, make sure she is wearing it and that it is turned on.
- There are many types of hearing aids (Fig. 2-5). Follow the manufacturer's directions for cleaning. In general, hearing aids need to be cleaned daily. Wipe it with the proper cleaning solution and a soft cloth. Do not put a hearing aid in water. Handle it carefully; do not drop it. Always store it inside its case when it is not being worn. Turn it off when it is not in use. Remove it before bathing, showering, or shampooing hair. Some hearing aids have rechargeable batteries. Some need to be recharged nightly. Follow instructions in the care plan.

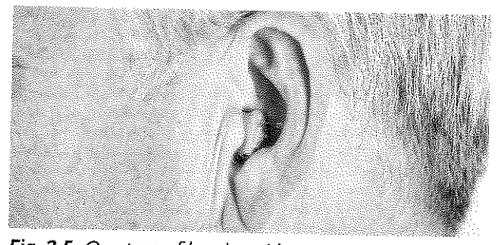

Fig. 2-5. One type of hearing aid.

- Reduce or remove background noise, such as TVs and loud speech. Close doors if needed.
- Get the resident's attention before speaking. Do not startle residents by approaching from behind. Walk in front or touch them lightly on the arm to let them know you are near.
- Speak clearly, slowly, and in good lighting. Directly face the person (Fig. 2-6). The light should be on your face, not on the resident's. Ask if she can hear what you are saying.

Fig. 2-6. Speak face-to-face in good light.

- Do not shout or mouth the words in an exaggerated way.
- Keep the pitch of your voice low.
- Residents may read lips, so do not chew gum or eat while speaking. Keep your hands away from your face while talking.
- If the resident hears better out of one ear, try to speak and stand on that side.
- Use short sentences and simple words. Avoid sudden topic changes.
- Repeat what you have said, using different words when needed. Some people who are hearing impaired want you to repeat exactly what you said. This is because they missed only a few words.
- Use picture cards or a notepad as needed.
- Residents who have a hearing impairment may hear less when they are tired or ill. This is true of everyone. Be patient and empathetic. Avoid long, tiring conversations.
- Some residents who are hearing impaired have speech problems and may be difficult to understand. Do not pretend you understand if you do not. Ask the resident to repeat what was said. Observe the lips, facial expressions, and body language. Then tell the resident what you think you heard. You can also ask the resident to write down words.
- Hearing decline can be a normal aspect of aging. Be understanding and supportive.

Vision Impairment

Vision impairment can affect people of all ages. It can exist at birth or develop gradually. It can occur in one eye or in both. It can also be the result of injury, illness, or aging. Some vision impairment causes people to wear corrective lenses, such as contact lenses or eyeglasses. Some people need to wear eyeglasses all the time. Others only need them to read or for activities that require seeing distant objects, such as driving.

Guidelines: Vision Impairment

- Encourage the use of eyeglasses or contact lenses (contacts) if worn.
- If the resident has eyeglasses, make sure they are clean. Clean glass lenses with water and a soft tissue. Clean plastic lenses with cleaning fluid and/or a lens cloth. Eyeglasses should fit properly and be in good condition. Report any issues to the nurse.
- Contact lenses are made of many types of plastic. Some can be worn and disposed of daily; others are worn for longer periods. If the resident is able, it is best to leave contact lens care to him.
- Knock on the door and identify yourself as soon as you enter the room. Do not touch the resident until you have said your name. Explain why you are there and what you would like to do. Let the resident know when you are leaving the room.
- Make sure there is proper lighting in the room. Face the resident when speaking.
- When you enter a new room with the resident, orient him to where things are. Describe the things you see around you. Try not to use words such as "see," "look," or "watch."
- Always tell the resident what you are doing while caring for him. Give specific directions, such as "on your right" or "in front of you." Talk directly to the resident whom you are

assisting. Do not talk to other residents or staff members.

- Use the face of an imaginary clock as a guide to explain the position of objects that are in front of the resident. For example, "There is a sofa at 7 o'clock" (Fig. 2-7).

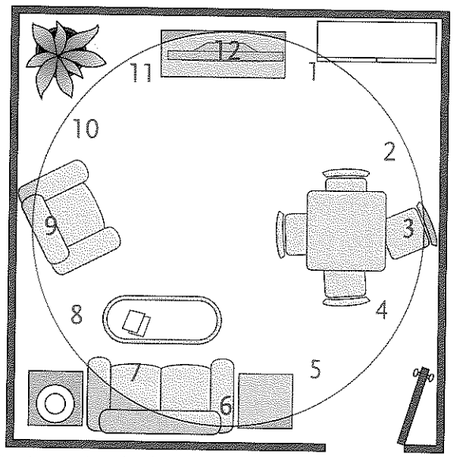

Fig. 2-7. *Using the face of an imaginary clock to explain the position of objects can be helpful.*

- Do not move personal items, furniture, or other objects. Put everything back where you found it.
- Leave the call light within reach. Tell the resident where the call light is.
- Leave doors completely open or completely closed, never partly open.
- If the resident needs guidance in getting around, walk slightly ahead. Let the resident touch or grasp your arm lightly. Walk at the resident's pace, not yours.
- Give assistance with cutting food and opening containers as needed.
- Use large clocks, clocks that chime, and radios to help keep track of time.
- Large-print books, audiobooks, digital books, and Braille books are available. Learning to read Braille, however, takes a long time and requires specialized training.
- If the resident has a guide dog, do not play with, distract, or feed it.
- Encourage the use of the other senses, such as hearing, touch, and smell. Encourage the resident to feel and touch things, such as clothing, furniture, or items in the room.

Mental Health Disorder

Mental health is the normal functioning of emotional and intellectual abilities. A person who is mentally healthy is able to

- Get along with others (Fig. 2-8)
- Adapt to change
- Care for himself and others
- Give and accept love
- Deal with situations that cause anxiety, disappointment, and frustration
- Take responsibility for decisions, feelings, and actions
- Control and fulfill desires and impulses appropriately

Fig. 2-8. *The ability to interact well with other people is a characteristic of mental health.*

Although it involves emotions and mental functions, a **mental health disorder** is like a physical disorder in many ways. It may have physical causes, such as differences in a person's brain structure or the way the brain works. It produces signs and symptoms and affects the body's ability to function. It responds to proper treatment and care. A mental health disorder disrupts a person's ability to function in the family, home, or community. It often causes inappropriate behavior. Some signs and symptoms of mental health disorders are confusion, disorientation, agitation, and anxiety.

People who have a mental health disorder cannot simply choose to be well. People who are mentally healthy are usually able to control their emotions and actions. People who have a mental health disorder may not have this control.

Different types of mental health disorders affect how well residents communicate. NAs should treat each resident as an individual to promote person-centered care. They should tailor their approach to the situation.

Guidelines: Communication and Mental Health Disorders

- Do not talk to adults as if they were children.
- Use simple, clear statements and a normal tone of voice.
- Be sure that what you say and how you say it show respect and concern.
- Sit or stand at a normal distance from the resident. Be aware of your body language.
- Be honest and direct, as with any resident.
- Avoid arguments.
- Maintain eye contact and listen carefully (Fig. 2-9).

Fig. 2-9. *Maintain eye contact and sit at a normal distance when communicating.*

Learning Objective 9 in Chapter 3 has more information about mental health disorders.

Combative Behavior

Residents may display **combative**, meaning violent or hostile, behavior. Such behavior may include hitting, pushing, kicking, or verbal attacks. It may be the result of a disease affecting the brain. It may be due to frustration, or it may just be part of someone's personality. In general, combative behavior is not a reaction to the caregiver and should not be taken personally. NAs should always report and document combative behavior. Even if an NA does not find the behavior upsetting, the care team needs to be aware of it.

Guidelines: Combative Behavior

- Block physical blows or step out of the way, but never hit back (Fig. 2-10). No matter how much a resident hurts you, or how angry or afraid you are, never hit or threaten a resident.

Fig. 2-10. *When dealing with combative residents, step out of the way, but never hit back.*

- Allow the resident time to calm down before the next interaction.
- Ensure the resident is safe and give her space. When possible, stand at least an arm's length away, closer to the hallway.
- Remain calm. Lower the tone of your voice.
- Be flexible and patient.
- Stay neutral. Do not respond to verbal attacks. Do not argue or accuse the resident of wrongdoing. If you must respond, say something

like "I understand that you're angry and frustrated. How can I make things better?"

- Do not use gestures that could frighten or startle the resident. Try to keep your hands open and in front of you.
- Be reassuring and supportive.
- Consider what provoked the resident. Sometimes something as simple as a change in caregiver or routine can be very upsetting to a resident. Get help to take the resident to a quieter place if needed.
- Report inappropriate behavior to the nurse.

Anger

Anger is a natural emotion that has many causes. These include disease, fear, pain, loneliness, and loss of independence. Anger may also just be a part of someone's personality. Some people get angry more easily than others.

People express anger in different ways. Some may shout, yell, threaten, throw things, or pace. Others express their anger by withdrawing, being silent, or sulking. Angry behavior should always be reported to the nurse.

Guidelines: Angry Behavior

- Stay calm. Do not argue or respond to verbal attacks.
- Empathize with the resident. Try to understand what he is feeling.
- Try to find out what caused the resident's anger. Listen attentively as the resident speaks. Remain silent. This may help the resident explain.
- Treat the resident with dignity and respect. Explain what you are going to do and when you will do it.
- Answer call lights promptly.
- Stay at a safe distance if the resident becomes combative.

Inappropriate Behavior

Inappropriate behavior from a resident includes trying to establish a personal, rather than a professional, relationship with an NA. Examples include asking personal questions, requesting visits on personal time, asking for or doing favors, giving tips or gifts, and lending or borrowing money.

Inappropriate behavior also includes making sexual advances and comments. Sexual advances include any sexual words, comments, or behavior that makes the person to whom the advances are directed feel uncomfortable.

Inappropriate behavior may include residents removing their clothes or touching themselves in public. Illness, dementia, confusion, or medication may cause this behavior.

Confused residents may have problems that mimic inappropriate sexual behavior. They may have an uncomfortable rash, clothes that are too tight, too hot, or too scratchy, or they may need to go to the bathroom. NAs need to observe for these problems.

The NA can address inappropriate behavior directly, saying something like "That makes me uncomfortable." Appropriate responses to personal questions include "I really can't talk about my personal life on the job." If an NA encounters a resident in any embarrassing situation, she should remain professional and not overreact. Trying to distract the resident may help. If it does not, the resident should be taken to a private area. The nurse should be notified. When residents act inappropriately, NAs should report the behavior, even if they think it was harmless.

Residents' Rights

Communicating with Residents

Nursing assistants' interactions with residents are important. Residents' physical and psychological health can depend a great deal on how NAs communicate. This is especially true for residents who are cognitively impaired, lonely, helpless, or bored. NAs should be comforting and kind with residents. They should listen if residents want to talk. Just the presence of a caring person can reassure residents that they are not alone.

4. Identify ways to promote safety and handle nonmedical emergencies

Safety

All staff members, including nursing assistants, are responsible for safety in a facility. It is very important to try to prevent accidents *before* they occur. Prevention is the key to safety. As NAs work, they should watch for safety hazards. They should report unsafe conditions to the supervisor promptly. Before leaving a resident's room, an NA should do a final check and ask himself:

- Is the call light within reach of the resident's stronger hand?
- Is the room tidy? Are the resident's items in their proper places?
- Is the furniture in the same place as I found it? Is the bed in its lowest position?
- Does the resident have a clear walkway around the room and into the bathroom?

Principles of Body Mechanics

Back strain or injury can be a serious problem for nursing assistants. **Body mechanics** is the way the parts of the body work together when a person moves. Using proper body mechanics helps save energy and prevent injury.

Alignment. Whether standing, sitting, or lying down, the body should be in alignment and should have good posture. This means that the two sides of the body are mirror images of each other, with body parts lined up naturally. **Posture** is the way a person holds and positions his body. A person can maintain correct body alignment when lifting or carrying an object by keeping it close to his body (Fig. 2-11). His feet and body should be pointed in the direction he is moving. He should avoid twisting at the waist.

Base of support. The base of support is the foundation that supports an object. The feet are the body's base of support. The wider the support, the more stable a person is. Standing with the feet shoulder-width apart allows for a greater base of support. This is more stable than standing with the feet together.

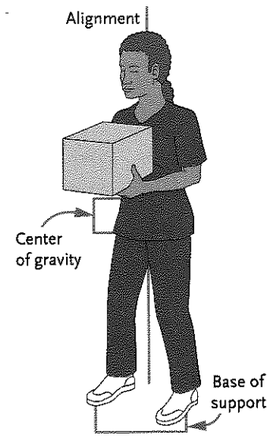

Fig. 2-11. Proper body alignment is important when standing and when sitting.

Center of gravity. The center of gravity in the body is the point where the most weight is concentrated. This point will depend on the position of the body. When a person stands, weight is centered in the pelvis. A low center of gravity gives a more stable base of support. Bending the knees when lifting an object lowers the pelvis and lowers a person's center of gravity. This gives more stability and makes the person less likely to fall or strain the working muscles.

Guidelines: Using Proper Body Mechanics

- Assess the situation first. Clear the path. Remove any obstacles.
- Use both arms and hands to lift, push, or carry objects.
- When lifting a heavy object from the floor, spread your feet shoulder-width apart. Bend your knees. Use the strong, large muscles in your thighs, upper arms, and shoulders to lift the object. Raise your body and the object together (Fig. 2-12).

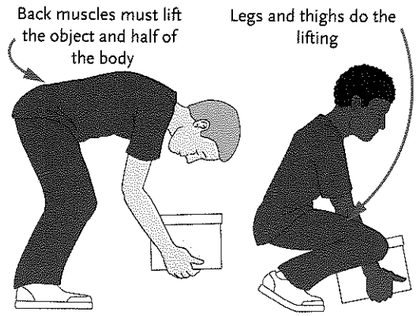

Fig. 2-12. *In this illustration, which person is lifting correctly?*

- Hold objects close to you when you are lifting or carrying them. This keeps the object closer to your center of gravity and base of support.
- Push or slide objects rather than lifting them.
- Avoid bending and reaching as much as possible. Move or position furniture so that you do not have to bend or reach.
- If you are making a bed, adjust the height to a safe working level, usually waist high. Avoid bending at the waist.
- When a task requires bending, use a good stance. Bend your knees to lower yourself (squat), rather than bending from the waist. This uses the big muscles in your legs and hips rather than the smaller muscles in your back.
- Do not twist when you are lifting or moving an object. Instead, turn your whole body. Pivot your feet instead of twisting at the waist. Your feet should point toward what you are lifting or moving.
- Get help from coworkers when possible for lifting or helping residents.
- Talk to residents before moving them. Let them know what you will do so they can help if possible. Agree on a signal, such as counting to three. Lift or move on three so that everyone moves together.
- To help a resident sit up, stand up, or walk, place your feet shoulder-width apart. Put one foot in front of the other and bend your knees. Your upper body should stay upright and in alignment. Do this whenever you have to support a resident's weight.
- Never try to catch a falling resident. If the resident falls, assist her to the floor. If you try to reverse a fall in progress, you could injure yourself and/or the resident.
- Report to the nurse any task that you cannot safely do. Never try to lift an object or a resident that you feel you cannot handle.

Accident Prevention

Falls

A fall is any sudden, uncontrollable descent from a higher to a lower level, with or without injury resulting. Falls make up most of the accidents that occur in care facilities. They can be caused by an unsafe environment, loss of abilities, diseases, and medications. Problems resulting from falls range from minor bruises to fractures and life-threatening injuries. A **fracture** is a broken bone. Falls are particularly common among the elderly. Older people are often more seriously injured by falls because their bones are more fragile. NAs should be especially alert to the risk of falls. All falls must be reported to the supervisor. These factors increase the risk of falls:

- Clutter
- Throw rugs
- Exposed electrical cords
- Slippery or wet floors
- Uneven floors or stairs
- Poor lighting
- Call lights that are out of reach or not promptly answered

Personal conditions that increase the risk of falls include medications, loss of vision, gait (walking) or balance problems, weakness, paralysis, and disorientation. **Disorientation** means confusion about person, place, or time.

Guidelines: Preventing Falls

- Clear all walkways of clutter, trash, throw rugs, and cords.
- All rugs should have a nonslip backing.
- Have residents wear nonskid, sturdy shoes. Make sure shoelaces are tied.
- Residents should not wear clothing that is too long or drags on the floor.
- Keep items that are used often close to residents, including call lights.
- Answer call lights right away.
- Immediately clean up spills on the floor.
- Report loose handrails immediately.
- Mark uneven flooring or stairs with tape of a contrasting color to indicate a hazard.
- Improve lighting where needed.
- Lock wheels and move footrests out of the way before helping residents into or out of wheelchairs.
- Lock bed wheels before helping a resident into and out of bed or when giving care.
- After completing care, return beds to their lowest position.
- Get help when moving residents. Do not assume you can do it alone. Keep residents' walking aids, such as canes or walkers, within their reach.
- Offer help with elimination often. Respond to requests for help immediately. Think about how you would feel if you had to wait for help to go to the bathroom.
- Leave furniture in the same place as you found it.
- Know which residents are at risk for falls. Pay attention so that you can give help often.
- If a resident starts to fall, be in a good position to help support her. Never try to catch a falling resident. Use your body to slide her to the floor. If you try to reverse a fall, you may hurt yourself and/or the resident.
- Whenever a resident falls, it must be reported to the nurse. Always complete an incident report, even if the resident says she feels fine.

Burns/Scalds

Burns can be caused by dry heat (e.g., a hot iron, stove, other electrical appliances), wet heat (e.g., hot water or other liquids, steam), or chemicals (e.g., cleaning products, acids). Small children, older adults, and people with loss of sensation (such as from paralysis or diabetes) are at greatest risk of burns. **Scalds** are burns caused by hot liquids. It takes five seconds or less for a serious burn to occur when the temperature of a liquid is 140°F. Coffee, tea, and other hot drinks are usually served at 160°F to 180°F. These temperatures can cause almost instant burns that require surgery. Preventing burns is important.

Guidelines: Preventing Burns and Scalds

- Always check water temperature with a water thermometer (if available) or on the inside of your wrist before using.
- Immediately report frayed electrical cords or appliances that look unsafe. Do not use them. Remove them from the room.
- Let residents know when you are about to pour or set down a hot liquid.
- Pour hot drinks away from residents. Keep hot drinks and liquids away from edges of tables. Put lids on them.
- Make sure residents are sitting down before serving hot drinks.
- If plate warmers or other equipment that produces heat are used, monitor them carefully.

Resident Identification

Residents must always be identified before giving care or serving food. Failure to identify residents can cause serious problems, even death. Facilities have different methods of identification. Some have pictures to identify residents. Others have signs outside residents' doors (Fig. 2-13). NAs must identify each resident according to facility policy before beginning any procedure or giving any care. They should identify residents before placing meal trays or helping with eating. The diet card should be checked against the resident's identification to make sure they match. The resident should be called by name and asked to state her name if able.

Fig. 2-13. *Along with the room number, a resident's name may be displayed outside the room to identify who is living in that room. However, the room number should not be used to identify residents. Before giving any care, nursing assistants must always properly identify residents.*

Choking

Choking can occur when eating, drinking, or taking medication. People who are weak, ill, or unconscious can choke on their own saliva. A person's tongue can also become swollen and obstruct the airway. To guard against choking, residents should eat in as upright a position as possible. Residents with swallowing problems may be prescribed special diets with thickened liquids. Thickened liquids are easier to swallow. Chapter 8 contains more information about thickened liquids.

Poisoning

There are many harmful substances in facilities that should not be swallowed. These include cleaning products, paints, medicines, toiletries, and glues. These products should be stored or locked away from confused residents or those with limited vision. Cleaning products should not be left in residents' rooms. Residents with dementia may hide food and let it spoil in closets, drawers, or other places. NAs should investigate any odors they notice. The number for the area's poison control center should be posted near all telephones.

Cuts/Abrasions

Cuts or abrasions typically occur in the bathroom at a facility. An **abrasion** is an injury that rubs off the surface of the skin. Sharp objects, such as scissors, nail clippers, and razors, should be put away after use. NAs should take care when transferring residents into and out of beds, chairs, and wheelchairs. When moving residents in wheelchairs, NAs should push the wheelchair forward. Wheelchairs should not be pulled from behind. When using elevators, wheelchairs should be turned around before entering, so that residents are facing forward.

Fire

All facilities have a fire safety plan, and all workers need to know this plan. Guidelines regarding fires and evacuations will be explained to all employees. Evacuation routes are posted in facilities. NAs should read and review them often. They should attend fire and disaster trainings when they are offered. A fast, calm, and confident response by the staff saves lives.

Guidelines: Reducing Fire Hazards and Responding to Fires

- Some facilities are nonsmoking, while others allow residents to smoke. If residents smoke, make sure they are in the proper area for smoking. Be sure that cigarettes are extinguished. Empty ashtrays often. Before emptying ashtrays, make sure there are no hot ashes or hot matches in the ashtray. Burn-resistant aprons for smokers may be available. These aprons help protect a person from burns from hot ashes and lit cigarettes if they are dropped. If residents wear these aprons when smoking, make sure buckles and snaps are properly fastened and that the apron covers their torso and lap. Never leave any smoker unattended.
- Residents may use electronic cigarettes (e-cigarettes, vapes, vape pens). Matches or lighters are not needed to light this cigarette; they use a battery to turn the liquid nicotine into vapor. To reduce the risk of fire, e-cigarettes should only be charged using the appliance supplied by the manufacturer. Batteries may need to be turned off manually and may need to be removed from chargers after they are fully charged. Follow instructions.
- Report frayed or damaged electrical cords immediately. Report electrical equipment in need of repair immediately.
- Fire alarms and exit doors should not be blocked. If they are, report this to the nurse.
- Every facility will have multiple fire extinguishers (Fig. 2-14). The PASS acronym will help you understand how to use one:

  Pull the pin.

  Aim at the base of the fire when spraying.

  Squeeze the handle.

  Sweep back and forth at the base of the fire.
- In case of fire, the RACE acronym is a good rule to follow:

  Remove anyone in danger if you are not in danger.

  Activate alarm or call 911.

  Contain the fire if possible by closing all doors and windows.

  Extinguish the fire, or the fire department will extinguish it. Evacuate the area if instructed to do so.

Fig. 2-14. *Know where the extinguishers are stored and how to use them.*

Follow these guidelines for helping residents exit the building safely:

- Know the facility's fire evacuation plan.
- Stay calm. Do not panic.
- Follow the directions of the fire department.
- Know which residents need one-on-one help or assistive devices. Immobile residents can be moved in several ways. If they have a wheelchair, help them into it. You can also use other wheeled transporters, such as carts, bath chairs, stretchers, or beds. A blanket can be used as a stretcher

or even pulled across the floor with someone on it.

- Residents who can walk will also need help getting out of the building. Those who have a hearing impairment may not hear the warnings and instructions. Staff will need to tell them directly what to do while guiding them to a safe exit. People with vision problems should be moved out of the way of the wheelchairs, carts, etc., and helped to the exit. Residents who are confused and disoriented will also need guidance.
- Remove anything blocking a window or door that could be used as a fire exit.
- Do not get into an elevator during a fire unless directed to do so by the fire department.
- Stay low in a room to escape a fire.
- If a door is closed, check for heat coming from it before opening it. If the door or doorknob feels hot, stay in the room if there is no safe exit. Plug the doorway (use wet towels or clothing) to prevent smoke from entering. Stay in the room until help arrives.
- Use the *stop, drop, and roll* fire safety technique to extinguish a fire on clothing or hair. Stop running or stay still. Drop to the ground, lying down if possible. Roll on the ground to try to extinguish the flames.
- Use a damp covering over the mouth and nose to reduce smoke inhalation.
- After leaving the building, move away from it.

Safety Data Sheet (SDS)

The **Occupational Safety and Health Administration** (**OSHA**, osha.gov) is a federal government agency that makes rules to protect workers from hazards on the job. OSHA requires that all hazardous chemicals have a Safety Data Sheet (SDS) (formerly called *Material Safety Data Sheet*, or *MSDS*). This sheet details the chemical ingredients, chemical dangers, and safe handling, storage, and disposal procedures for the product. Information about emergency response actions to be taken are also included. Some facilities use a toll-free number to access SDS information. These sheets must be accessible in work areas for all employees. Important information about the SDS includes the following:

- Employers must have an SDS for every chemical used.
- Employers must provide easy access to the SDS.
- Staff members must know where these sheets are kept and how to read them. They should ask for help if they do not know how to do this.

The list of hazardous chemicals that must have an SDS will be updated as new chemicals are purchased.

Disaster Guidelines

Disasters can include fire, flood, earthquake, hurricane, tornado, or other severe weather. Human-created dangers, such as acts of terrorism, bomb threats, and active shooter situations, can pose threats to healthcare workers and residents.

NAs should know the appropriate action to take when disasters occur. Each facility has a local and area-specific disaster plan, and NAs will be trained on these plans. Annual in-services and disaster drills are often held at facilities. NAs should take advantage of these sessions and pay close attention to instructions.

During natural disasters, a nurse or the administrator will give directions. NAs should listen carefully and follow instructions. Facilities may rely on local or state groups and the American Red Cross to assume responsibility for people who are ill and disabled. The following guidelines apply in any disaster situation:

- Remain calm.
- Know the locations of all exits and stairways.
- Know where the fire alarms and extinguishers are located.
- Know the appropriate action to take in any situation.
- Use the internet to stay informed, or keep the television or radio tuned to a local station to get the latest information.

In addition, NAs will be required to know specific guidelines for the area in which they work. The instructor's teaching material has more information on specific disasters and response guidelines.

5. Demonstrate how to recognize and respond to medical emergencies

Medical emergencies may be the result of accidents or sudden illnesses. This section discusses what to do in a medical emergency. Heart attacks, strokes, diabetic emergencies, choking, automobile accidents, and gunshot wounds are all medical emergencies. Falls, burns, and cuts can also be emergencies. In an emergency, responders should remain calm, act quickly, and communicate clearly. These steps show the correct response to emergencies:

Assess the situation. The responder should try to find out what has happened. She must make sure she is not in danger and notice the time.

Assess the victim. The responder should ask the injured or ill person what has happened. If the person is unable to respond, he may be unconscious. Being **conscious** means being mentally alert and having awareness of surroundings, sensations, and thoughts. Tapping the person and asking if he is all right helps to determine if a person is conscious. The responder should speak loudly and use the person's name if she knows it. If there is no response, she should assume the person is unconscious. This is an emergency situation. She should call for help right away or send someone else to call.

If a person is conscious and able to speak, then he is breathing and has a pulse. The responder should talk with him about what happened. She should get the person's permission to touch him. Anyone who is unable to give consent for treatment, such as a child with no parent near or an unconscious or seriously injured person, may be treated with *implied consent*. This means that if the person were able or the parents were present, they would have given consent. The person should be checked for the following:

- Severe bleeding
- Changes in consciousness
- Irregular breathing
- Unusual color or feel to the skin
- Swollen places on the body
- Medical alert tags
- Pain

If any of these exists, professional medical help may be needed. When responding to an emergency, an NA should always get help. She should call the nurse before doing anything else. If the injured or ill person is conscious, he may be frightened. The responder should listen to the person and tell him what is being done to help him. A calm and confident response will help reassure him.

After an emergency is over, the NA will need to document the emergency and complete an incident report. It is important to include as many details as possible and report only facts.

First aid is emergency care given immediately to an injured person by the first people to respond to an emergency. **Cardiopulmonary resuscitation** (**CPR**) refers to medical procedures used when a person's heart or lungs have stopped working. CPR is used until medical help arrives.

Quick action is necessary. CPR must be started immediately to prevent or lessen brain damage. Brain damage can occur within 4–6 minutes after the heart stops beating and breathing stops. The person can die within 10 minutes.

Employers often arrange for NAs to be trained in CPR. If not, the American Heart Association (AHA, heart.org) and American Red Cross (ARC, redcross.org) have more information about training. CPR is an important skill to learn.

Nursing assistants need to know their facility's policies on initiating CPR. Some employers do not allow NAs to begin CPR without the direction of the nurse.

Choking

When something is blocking the tube through which air enters the lungs, the person has an **obstructed airway**. When people are choking, they usually put their hands to their throats (Fig. 2-15). NAs may encounter residents who are choking or seem to be choking. As long as the resident can speak, breathe, or cough, the NA should only encourage her to cough as forcefully as possible to get the object out. The NA should stay with the resident until she stops choking or can no longer speak, breathe, or cough.

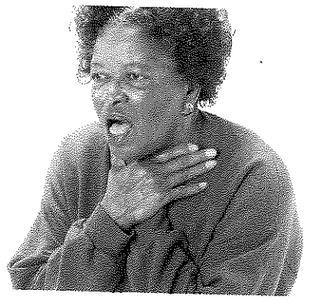

Fig. 2-15. *People who are choking usually put their hands to their throats.*

If a resident can no longer speak, breathe, or cough, the NA should call for help immediately by using the call light or emergency cord. The choking victim should not be left alone.

Abdominal thrusts are a method of attempting to remove an object from the airway of someone who is choking. These thrusts work to remove the blockage upward, out of the throat. The NA should make sure the resident needs help before starting to give abdominal thrusts. The resident must show signs of a severely obstructed airway. These signs include poor air exchange, an increase in trouble breathing, silent coughing, blue-tinged (**cyanotic**) skin, and an inability to speak, breathe, or cough. The NA should ask, "Are you choking? I know what to do. Can I help you?" If the resident nods her head yes, she has a severe airway obstruction and needs immediate help. The NA should call for help and begin giving abdominal thrusts. This procedure should never be performed on a person who is not choking. Abdominal thrusts risk injury to the ribs and internal organs.

Performing abdominal thrusts for the conscious person

1. Stand behind the person and bring your arms under her arms. Wrap your arms around the person's waist.
2. Make a fist with one hand. Place the flat, thumb side of the fist against the person's abdomen, above the navel but below the breastbone (Fig. 2-16).

Fig. 2-16. *Place the flat, thumb side of your fist against the person's abdomen, above the navel but below the breastbone.*

3. Grasp the fist with your other hand. Pull both hands toward you and up, quickly and forcefully.
4. Repeat until the object is pushed out or the person loses consciousness.
5. Report and document the incident properly.

If the resident becomes unconscious while choking, she should be helped to the floor gently. She should be lying on her back on a hard surface with her face up. The NA should begin CPR for an unconscious person if trained and allowed to do so. The NA should make sure help is on the way. The resident may have a completely blocked airway and may need medical help immediately. The NA should stay with the resident until help arrives.

Shock

Shock occurs when organs and tissues in the body do not receive an adequate blood supply. Bleeding, heart attack, severe infection, and falling blood pressure can lead to shock. Shock can become worse when the person is frightened or in severe pain.

Shock is a dangerous, life-threatening situation. Signs of shock include pale, gray, bluish, or discolored skin, staring, increased pulse and respiration rates, low blood pressure, and extreme thirst. An NA should always call for help if she suspects a resident is in shock.

Responding to shock

1. Notify the nurse immediately. Victims of shock should always receive medical care as soon as possible.
2. If you need to control bleeding, put on gloves first. This procedure is described later in the chapter.
3. Have the person lie down on her back. If the person is bleeding from the mouth or vomiting, place her on her left side. Turning the person reduces the risk of choking or aspiration. Elevate the legs about 8 to 12 inches unless the person has a head, neck, back, spinal, or abdominal injury; breathing difficulties; or fractures (Fig. 2-17). Elevating the legs allows blood to flow back to the brain (and other vital areas). Never elevate a body part if the person has a broken bone or if it causes pain.

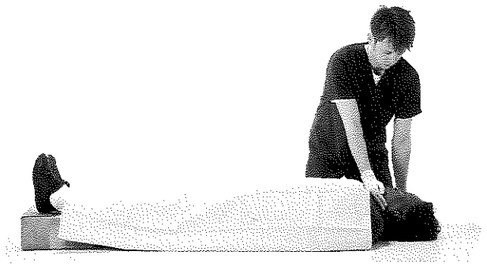

Fig. 2-17. *If a person is in shock, elevate the legs unless the person has head, neck, back, spinal, or abdominal injuries; breathing difficulties; or fractures.*

4. Check pulse and respirations if possible (Chapter 7). If the person stops breathing or has no pulse, begin CPR if trained and allowed to do so.
5. Keep the person as calm and comfortable as possible.
6. Maintain normal body temperature. If the weather is cold, place a blanket around the person. If the weather is hot, provide shade.
7. Do not give the person food or liquids.
8. Report and document the incident properly.

Myocardial Infarction or Heart Attack

Myocardial infarction (**MI**), or heart attack, occurs when the heart muscle itself does not receive enough oxygen because blood vessels

are blocked. A myocardial infarction is an emergency that can result in serious heart damage or death. The following are signs and symptoms of MI:

- Sudden, severe pain, pressure, or squeezing in the chest, usually on the left side or in the center, behind the breastbone
- Pain or discomfort in other areas of the body, such as one or both arms, the back, neck, jaw, or stomach
- Indigestion or heartburn
- Nausea and vomiting
- Shortness of breath
- Dizziness
- Pale or cyanotic color of skin or mucous membranes, indicating lack of oxygen
- Perspiration
- Cold and clammy skin
- Weak and irregular pulse rate
- Low blood pressure
- Anxiety and a sense of doom
- Denial of a heart problem

The pain of a heart attack is commonly described as a crushing, pressing, squeezing, stabbing, piercing pain, or "like someone is sitting on my chest." The pain may go down the inside of the left arm. A person may also feel it in the neck and/or in the jaw. The pain usually does not go away.

As with men, women may experience chest pain or pressure. Women, though, can have heart attacks without chest pressure. Women are more likely to have shortness of breath, nausea, vomiting, light-headedness, fainting, dizziness, stomach pain, sweating, fatigue, and back, neck, or jaw pain. Some women's symptoms seem more flu-like, and women are more likely to deny that they are having a heart attack. An NA must take immediate action if a resident has any of these symptoms.

Responding to a myocardial infarction

1. Notify the nurse immediately.
2. Place the person in a comfortable position. Encourage him to rest. Reassure him that you will not leave him alone.
3. Loosen clothing around the person's neck (Fig. 2-18).

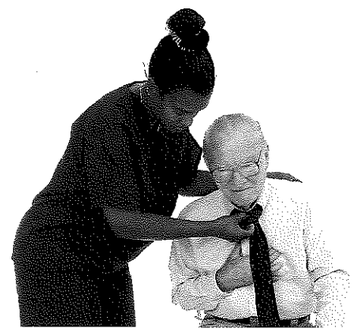

Fig. 2-18. *Loosen clothing around the person's neck if you suspect he is having an MI.*

4. Do not give the person food or liquids.
5. Monitor the person's breathing and pulse. If the person stops breathing and has no pulse, begin CPR if trained and allowed to do so.
6. Stay with the person until help arrives.
7. Report and document the incident properly.

Some states allow nursing assistants to offer heart medication, such as nitroglycerin, to a resident having a heart attack. If allowed to do this, the NA can only offer the medication. She cannot place it in the resident's mouth.

Bleeding

Severe bleeding can cause death quickly and must be controlled.

Controlling bleeding

1. Notify the nurse immediately.
2. Put on gloves. Take time to do this. If the resident is able, he can hold his bare hand over the wound until you can put on gloves.
3. Hold a thick sterile pad, clean cloth, or clean towel against the wound.
4. Press down hard directly on the bleeding wound until help arrives. Do not decrease pressure (Fig. 2-19). Put additional pads or cloths over the first pad if blood seeps through. Do not remove the first pads.

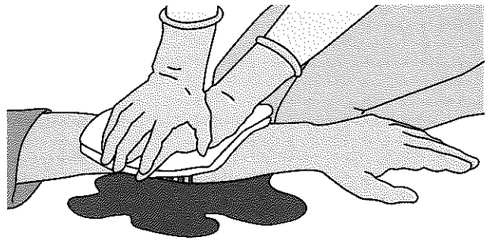

Fig. 2-19. *Press down hard directly on the bleeding wound; do not decrease pressure.*

5. If you can, raise the wound above the level of the heart to slow the bleeding. Prop up the limb if the wound is on an arm, leg, hand, or foot, and if there are no head, neck, back, spinal, or abdominal injuries; breathing difficulties; or fractures. Use towels or other absorbent material.
6. When bleeding is under control, secure the dressing to keep it in place. Check for symptoms of shock (pale skin, staring, increased pulse and respiration rates, low blood pressure, and extreme thirst). Stay with the person until help arrives.
7. Remove and discard your gloves. Wash your hands thoroughly.
8. Report and document the incident properly.

Burns

Care of a burn depends on its depth, size, and location. Burns may require emergency help.

Treating burns

To treat a minor burn:

1. Notify the nurse immediately. Put on gloves.
2. Use cool, clean water to decrease the skin temperature and prevent further injury. Do not use ice or ice water, as ice may cause further skin damage. Dampen a clean cloth with cool water. Place it over the burn.
3. Once the pain has eased, you may cover the area with a dry, clean dressing or nonadhesive sterile bandage.
4. Remove and discard your gloves. Wash your hands.
5. Never use any kind of ointment, salve, or grease on a burn.

For more serious burns:

1. Remove the person from the source of the burn. If clothing has caught fire, have the person stop, drop, and roll, or smother the fire with a blanket or towel to put out flames. Protect yourself from the source of the burn.
2. Notify the nurse immediately. Put on gloves.
3. Check for breathing, pulse, and severe bleeding. If the person is not breathing and has no pulse, begin CPR if trained and allowed to do so.
4. Do not use any type of ointment, water, salve, or grease on the burn.
5. Do not try to pull away any clothing from burned areas. Cover the burn with sterile gauze or a clean sheet. Apply the gauze or sheet lightly. Do not rub the burned area.

6. Do not give the person food or liquids. Monitor vital signs and wait for emergency medical help.
7. Remove and discard your gloves. Wash your hands.
8. Report and document the incident properly.

Fainting

Fainting, also called **syncope**, occurs as a result of decreased blood flow to the brain, causing a loss of consciousness. Fainting may be the result of an abnormal heart rhythm, hunger, hypoglycemia (low blood glucose), dehydration, fear, pain, fatigue, standing for a long time, poor ventilation, certain medications, pregnancy, or overheating. Signs and symptoms of fainting include dizziness, light-headedness, nausea, perspiration, pale skin, weak pulse, shallow respirations, and blackness in the visual field.

Responding to fainting

1. Notify the nurse immediately.
2. Have the person lie down or sit down before fainting occurs.
3. If the person is in a sitting position, have him bend forward (Fig. 2-20). He can place his head between his knees if he is able. If the person is lying flat on his back, and there are no head, neck, back, spinal, or abdominal injuries; breathing difficulties; or fractures, elevate his legs about 12 inches.
4. Loosen any tight clothing.
5. Have the person stay in position for at least five minutes after symptoms disappear.
6. Help the person get up slowly. Continue to observe him for symptoms of fainting. Stay with him until he feels better. If you need help but cannot leave him, use the call light.

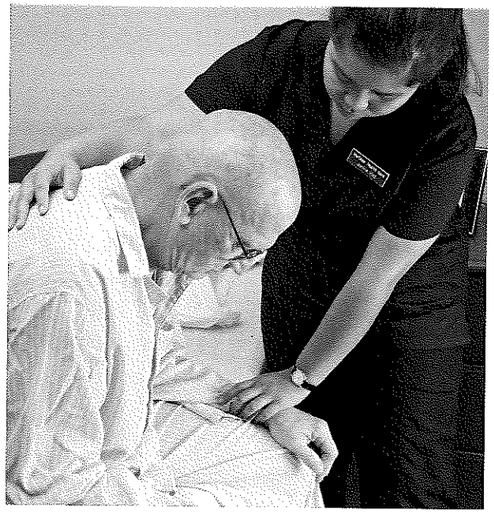

Fig. 2-20. *Have the person bend forward if he is sitting.*

7. If a person does faint, lower him to the floor or other flat surface. Position him on his back. If he has no head, neck, back, spinal, or abdominal injuries; breathing difficulties; or fractures, elevate his legs 12 inches. If unsure about injuries, leave him flat on his back. Loosen any tight clothing. Check to make sure he is breathing. He should recover quickly, but keep him lying down for several minutes. Report the incident to the nurse immediately. Fainting may be a sign of a more serious medical condition.
8. Report and document the incident properly.

Insulin Reaction and Diabetic Ketoacidosis

Insulin reaction and diabetic ketoacidosis are problems of diabetes that can be life-threatening. **Insulin reaction**, or hypoglycemia, can result from either too much insulin or too little food. It occurs when insulin is given and the person skips a meal or does not eat all the food required. Even when a regular amount of food is eaten, physical activity may rapidly metabolize the food. This causes too much insulin to be in the body. Vomiting and diarrhea may also lead to insulin reaction in people who have diabetes.

The first signs of insulin reaction include feeling weak or different, nervousness, dizziness, and perspiration. The NA should immediately report these signs to the nurse. These signal that the resident needs food in a form that can be rapidly absorbed. A glass of milk, fruit juice, or water with sugar dissolved in it should be consumed right away. A glucose tablet is another quick source of sugar. A fingerstick blood glucose test may need to be done right away. Other signs and symptoms include the following:

- Hunger
- Headache
- Rapid pulse
- Low blood pressure
- Cold, clammy skin
- Confusion
- Trembling
- Blurred vision
- Numbness of the lips and tongue
- Unconsciousness

Diabetic ketoacidosis (**DKA**) is caused by having too little insulin in the body. It can result from undiagnosed diabetes, infection, going without insulin or not taking enough, eating too much, not getting enough exercise, or physical or emotional stress. The signs of the onset of diabetic ketoacidosis include increased hunger, thirst, or urination; abdominal pain; deep or labored breathing; and breath that smells sweet or fruity. The nurse should be notified immediately if a resident has shown signs of DKA. Other signs and symptoms include the following:

- Headache
- Weakness
- Rapid, weak pulse
- Low blood pressure
- Dry skin
- Flushed cheeks
- Drowsiness
- Nausea and vomiting
- Shortness of breath or air hunger (person gasping for air and being unable to catch his breath)
- Unconsciousness

Chapter 4 has more information about diabetes.

Seizures

Seizures are involuntary, often violent, contractions of muscles. They can involve a small area or the entire body. Seizures are caused by abnormalities in the brain. They can occur in young children who have a high fever. Older children and adults who have a serious illness, fever, head injury, or a seizure disorder such as epilepsy may also have seizures.

The main goal during a seizure is to make sure the resident is safe. During a seizure, a person may shake severely and thrust his arms and legs uncontrollably. He may clench his jaw, drool, and be unable to swallow. Most seizures last only a short time.

Responding to seizures

1. Note the time. Put on gloves. Remove eyeglasses if the person is wearing them.
2. If the person is walking or standing, lower him to the floor. Cradle and protect his head. If a pillow is nearby, place it under his head. Loosen clothing to help with breathing. Try to turn him to one side to help lower the risk of choking. This may not be possible during a violent seizure.
3. Have someone call the nurse immediately or use the call light. Do not leave the person unless you must do so to get medical help.
4. Move furniture away to prevent injury.

5. Do not try to stop the seizure or restrain the person.
6. Do not force anything between the person's teeth. Do not place your hands in his mouth for any reason. You could be bitten.
7. Do not give the person food or liquids.
8. When the seizure is over, note the time. Gently turn the person to his left side unless he has a head, neck, back, spinal, or abdominal injury; breathing difficulties; or fractures. Turning the person reduces the risk of choking on vomit or saliva. If the person begins to choke, get help immediately. Check for adequate breathing and pulse. If the person is not breathing and has no pulse, begin CPR if you are trained and allowed to do so. Do not begin CPR during a seizure.
9. Remove and discard your gloves. Wash your hands.
10. Report and document the incident properly, including how long the seizure lasted.

CVA/Stroke

Cerebrovascular accident (**CVA**), or stroke (sometimes called *brain attack*), occurs when blood supply to a part of the brain is blocked or a blood vessel leaks or ruptures within the brain. A quick response to a suspected stroke is critical. Tests and treatment need to be given within a short time of the stroke's onset. Early treatment may be able to reduce the severity of the stroke.

A **transient ischemic attack** (**TIA**) is a warning sign of a CVA. It is the result of a temporary lack of blood supply to the brain. Symptoms may last up to 24 hours. They include difficulty speaking, weakness on one side of the body, temporary loss of vision, and numbness or tingling. These symptoms should not be ignored. They should be reported to the nurse immediately. These are also signs that a TIA or CVA is occurring:

- Facial numbness, weakness, or drooping, especially on one side
- Paralysis on one side of the body (**hemiplegia**)
- Numbness or weakness, especially on one side (**hemiparesis**)
- Slurred speech or inability to speak (**expressive aphasia**)
- Inability to understand spoken or written words (**receptive aphasia**)
- Use of inappropriate words
- Severe headache
- Blurred vision
- Ringing in the ears
- Redness in the face
- Noisy breathing
- Elevated blood pressure
- Slow pulse rate
- Nausea or vomiting
- Loss of bowel and bladder control
- Seizures
- Dizziness
- Loss of consciousness

These symptoms may also be related to TIA, especially in women:

- Pain in the face, arms, and legs
- Hiccups
- Weakness
- Chest pain
- Shortness of breath
- Palpitations

F.A.S.T.

The acronym **F.A.S.T.** can be used as a way to remember the sudden signs that a stroke is occurring.

(F)ace: Is one side of the face drooping? Is it numb? Ask the person to smile. Is the smile uneven?

(A)rms: Is one arm numb or weak? Ask the person to raise both arms. Check to see if one arm drifts downward.

(S)peech: Is the person's speech slurred? Is the person unable to speak? Can the person be understood? Ask the person to repeat a simple sentence and see if the sentence is repeated correctly.

(T)ime: Time is of the utmost importance when responding to a stroke. If the person shows any of the symptoms listed above, report to the nurse immediately.

The website for the American Stroke Association (stroke.org) has more information.

Chapter 4 has more information about CVAs.

Vomiting

Vomiting, or **emesis**, is the act of ejecting stomach contents through the mouth and/or nose. It can be a sign of illness, injury, or a reaction to medication. Some residents, such as those with cancer who are undergoing chemotherapy, may vomit frequently as a result of treatment. Because an NA may not know when a resident is going to vomit, he may not have time to explain what he will do and assemble supplies ahead of time. Vomiting is unpleasant. The NA should talk to the resident soothingly as he helps him clean up. He should tell the resident what he is doing to help him.

Responding to vomiting

1. Notify the nurse immediately.
2. Put on gloves.
3. Make sure the head is up or turned to one side. If the resident is unconscious, they should be turned on their left side. Place an emesis basin under the chin. Remove it when vomiting has stopped.
4. Remove soiled linens or clothes and set aside. Replace with fresh linens or clothes.
5. If the resident's intake and output (I&O) is being monitored (Chapter 7), measure and note the amount of vomitus.
6. Flush the vomit down the toilet unless vomit is red, has blood in it, or looks like wet coffee grounds, or has medication in it. If these signs are observed, show the vomit to the nurse before discarding it. After disposing of the vomit, wash, dry, and store the basin.
7. Remove and discard your gloves.
8. Wash your hands.
9. Put on clean gloves.
10. Provide comfort to the resident: wipe the face and mouth, position comfortably, and offer a drink of water or oral care (Fig. 2-21). Oral care helps get rid of the taste of vomit in the mouth.

Fig. 2-21. *Be calm and comforting when helping a resident who has vomited.*

11. Put soiled linen in the proper containers.
12. Remove and discard your gloves.
13. Wash your hands again.
14. Report and document the incident properly. Document the time, amount, color, odor, and consistency of vomitus.

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6. Describe and demonstrate infection prevention and control practices

Infection prevention is the set of methods practiced in healthcare facilities to prevent and control the spread of disease. Facilities are required to employ a health professional called an *infection preventionist* to help with infection prevention. This team member is responsible for overseeing the infection prevention program at the facility, as well as completing other duties. Preventing the spread of infection is the responsibility of all care team members. NAs must know and follow their facility's infection prevention policies. These policies help protect staff members, residents, and others from disease.

A **microorganism** (**MO**), also called a *microbe*, is a living thing that is so small that it can be seen only under a microscope. Microorganisms are always present in the environment. **Infections** occur when harmful microorganisms, called **pathogens**, invade the body and multiply.

There are two main types of infections: localized and systemic. A **localized infection** is limited to a specific location in the body. It has local symptoms, which means the symptoms are near the site of infection. For example, if a wound becomes infected, the area around it may become red, swollen, warm, and painful. A **systemic infection** affects the entire body. This type of infection travels through the bloodstream and is spread throughout the body. It causes general symptoms, such as fever, chills, mental confusion, or lower than normal blood pressure.

A type of infection that can be localized or systemic is a healthcare-associated infection. A **healthcare-associated infection** (**HAI**) is an infection acquired in a healthcare setting during the delivery of medical care. Healthcare settings include hospitals, long-term care facilities, and outpatient surgery centers, among others.

Preventing the spread of infection is important. To understand how to prevent disease, it is helpful to first understand how it is spread. The **chain of infection** is a way of describing how disease is transmitted from one human being to another (Fig. 2-22). Definitions and examples of each of the six links in the chain of infection follow.

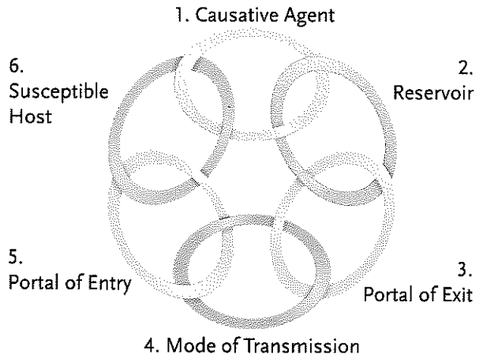

Fig. 2-22. The chain of infection.

Link 1: The **causative agent** is a pathogenic microorganism that causes disease. Causative agents include bacteria, viruses, fungi, and parasites. Normal flora are the microorganisms that live in and on the body. They normally do not cause harm to a healthy person as long as the flora remain in that particular area. When they enter a different part of the body, they may cause an infection.

Link 2: A **reservoir** is where the pathogen lives and multiplies. A reservoir can be a human, animal, plant, soil, or substance. Warm, dark, and moist places are the ideal environments for microorganisms to live, grow, and multiply. Some microorganisms need oxygen to survive; others do not. Examples of reservoirs include the lungs, blood, and the large intestine.

Link 3: The **portal of exit** is any body opening on an infected person that allows pathogens to leave (Fig. 2-23). These include the nose, mouth, eyes, or a cut in the skin.

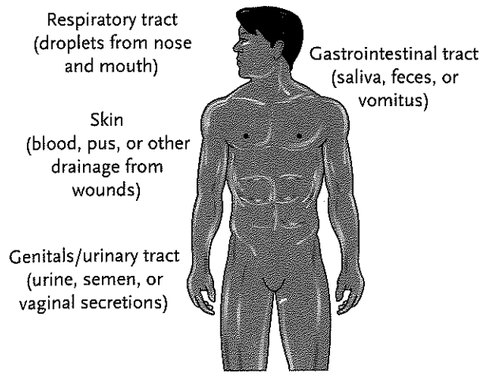

Fig. 2-23. Portals of exit.

Link 4: The **mode of transmission** describes how the pathogen travels. The main routes of transmission are contact, droplet, and airborne transmission. **Direct contact** happens by touching the infected person or their secretions. **Indirect contact** results from touching an object contaminated by the infected person, such as a needle, dressing, or tissue. In the healthcare setting, the primary route of disease transmission within is via the hands of healthcare workers.

Link 5: The **portal of entry** is any body opening on an uninfected person that allows pathogens to enter (Fig. 2-24). These include the nose, mouth, eyes, and other mucous membranes, cuts in the skin, and cracked skin. **Mucous membranes** are the membranes that line body cavities that open to the outside of the body. These include the linings of the mouth, nose, eyes, rectum, and genitals.

Link 6: A **susceptible host** is an uninfected person who could get sick. Examples include all healthcare workers and anyone in their care who is not already infected with that particular disease.

If one of the links in the chain of infection is broken, then the spread of infection is stopped. Infection prevention practices help stop pathogens from traveling (Link 4) and from getting on a person's hands, nose, eyes, mouth, skin, etc. (Link 5). Immunizations (Link 6) reduce a person's chances of getting sick from diseases such as hepatitis B and influenza (flu).

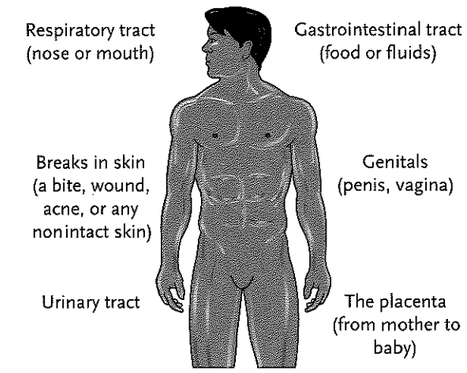

Fig. 2-24. Portals of entry.

Transmission (passage or transfer) of most **infectious** diseases can be blocked by using proper infection prevention practices, such as handwashing. Handwashing is the most important way to stop the spread of infection. All caregivers should wash their hands often.

Handwashing is a part of medical asepsis. **Medical asepsis** refers to measures used to reduce and prevent the spread of pathogens. Medical asepsis is used in all healthcare settings. **Surgical asepsis**, also known as *sterile technique*, makes an object or area free of all microorganisms (not just pathogens). Surgical asepsis is used for many types of procedures, such as changing catheters.

Standard Precautions and Transmission-Based Precautions

State and federal government agencies have guidelines and laws concerning infection prevention and control. The **Centers for Disease Control and Prevention** (**CDC**, cdc.gov) is a federal government agency that issues guidelines to protect and improve the health of indi-

viduals and communities. Through education, the CDC aims to prevent and control disease, injury, and disability, as well as to promote public health.

The CDC created an infection prevention system to reduce the risk of contracting infectious diseases in healthcare settings. There are two levels of precautions within the infection prevention system: Standard Precautions and Transmission-Based Precautions.

Following **Standard Precautions** means treating blood and other body fluids, nonintact skin (like abrasions, pimples, or open sores), and mucous membranes as if they were infected. Body fluids include blood, tears, saliva, **sputum** (mucus coughed up), urine, feces, semen, vaginal secretions, pus or other wound drainage, and vomit. They do not include sweat.

Standard Precautions must be used with every resident. This promotes safety. An NA cannot tell by looking at residents or even by reading their medical charts whether they have a contagious disease such as tuberculosis, hepatitis, or influenza. Many diseases can be spread even before the infected person shows signs or has been diagnosed.

Standard Precautions and Transmission-Based Precautions are ways to stop the spread of infection. They interrupt the mode of transmission. In other words, these guidelines do not stop an infected person from giving off pathogens. However, NAs help prevent those pathogens from infecting them or those in their care by following these guidelines:

- Standard Precautions must be practiced with every single person in an NA's care.
- Transmission-Based Precautions vary based on how an infection is transmitted. When indicated, they are used **in addition** to Standard Precautions. More information about these precautions is located later in the chapter.

Guidelines: Standard Precautions

- **Wash your hands** before putting on gloves. Wash your hands immediately after removing your gloves. Be careful not to touch clean objects with your used gloves.
- **Wear gloves** if you may come into contact with blood; body fluids or secretions; broken or open skin, such as abrasions, acne, cuts, stitches, or staples; or mucous membranes. Such contact occurs during mouth care; toilet assistance; perineal care; helping with a bedpan or urinal; ostomy care; cleaning up spills; cleaning basins, urinals, bedpans, and other containers that have held body fluids; and disposing of wastes.
- **Remove gloves** immediately when finished with a procedure and wash your hands.
- **Immediately wash all skin surfaces that have been contaminated** with blood and body fluids.
- **Wear a disposable gown** that is resistant to body fluids if you may come into contact with blood, body fluids, secretions, excretions, or when splashing or spraying of blood or body fluids is likely. If a resident has a contagious illness, wear a gown even if it is not likely you will come into contact with blood or body fluids.
- **Wear a mask and protective goggles and/or a face shield** if you may come into contact with blood, body fluids, secretions, excretions, or when splashing or spraying of blood or body fluids is likely.
- **Wear gloves and use caution when handling razor blades, needles, and other sharps. Sharps** are needles or other sharp objects. Avoid nicks and cuts when shaving residents. Place sharps carefully in a biohazard container for sharps. Biohazard containers used for sharps are puncture-resistant, leakproof containers. They are clearly labeled and warn of the danger of the contents inside (Fig. 2-25).

Fig. 2-25. This label indicates that the material is potentially infectious.

- **Never attempt to recap needles or sharps after use.** You might stick yourself. Dispose of them in a biohazard container for sharps.
- **Carefully bag all contaminated supplies.** Dispose of them according to facility policy.
- **Clearly label body fluids that are being saved for a specimen** with the resident's name, date of birth, room number, date, and a biohazard label. Keep them in a container with a lid. Put in a biohazard specimen bag for transportation if required.
- **Dispose of contaminated wastes according to your facility's policy.** Waste containing blood or body fluids is considered biohazardous waste. Liquid waste can usually be disposed through the regular sewer system as long as there is no splashing, spraying, or aerosolizing of the waste as it is being disposed. Appropriate personal protective equipment needs to be worn, followed by proper removal and handwashing. Follow instructions.

Standard Precautions should always be practiced on all residents, regardless of their infection status. This greatly reduces the risk of transmitting infection.

Nursing assistants use their hands constantly while they work. Microorganisms are on everything they touch. The single most common way for healthcare-associated infections (HAIs) to be spread is via the hands of healthcare workers. Handwashing is the most important thing NAs can do to prevent the spread of disease.

The CDC has defined **hand hygiene** as washing hands with soap and water or using an alcohol-based hand rub (ABHR). Alcohol-based hand rubs (often called *hand sanitizer*) include gels, rinses, sprays, and foams that do not require the use of water.

Alcohol-based hand rubs have proven effective in reducing bacteria on the skin. However, they are not a substitute for frequent, proper handwashing. When hands are visibly soiled, they should be washed with soap and water. Hand rubs can be used in addition to handwashing any time hands are not visibly soiled. When using a hand rub, the hands must be rubbed together until the product has completely dried. Hand lotion can help prevent dry, cracked skin.

NAs should not wear rings and bracelets while working. This jewelry may increase the risk of contamination. Fingernails should be short, smooth, and clean. Artificial nails should not be worn because they harbor bacteria and increase the risk of contamination even if hands are washed often. NAs should wash their hands at these times:

- When first arriving at work
- Whenever hands are visibly soiled
- Before, between, and after all contact with residents
- Before putting on gloves and after removing gloves
- After contact with any body fluids, mucous membranes, nonintact skin, or wound dressings
- After handling contaminated items
- After contact with any object in the resident's room (care environment)

- Before and after touching meal trays and/or handling food
- Before and after helping with meals
- Before getting clean linen
- Before and after using the toilet
- After touching garbage or trash
- After picking up anything from the floor
- After blowing or wiping the nose or coughing or sneezing into the hands
- Before and after eating
- After smoking
- After touching areas on the body, such as the mouth, face, eyes, hair, ears, or nose
- Before and after applying makeup
- After any contact with pets or after contact with pet care items
- Before leaving the facility

Washing hands (hand hygiene)

Equipment: soap, paper towels

1. Turn on the water at the sink. Keep your clothes dry because moisture breeds bacteria. Do not let your clothing touch the outside portion of the sink or counter.
2. Wet hands and wrists thoroughly (Fig. 2-26).

Fig. 2-26. *Keeping arms angled downward, wet hands and wrists thoroughly.*

3. Apply soap to your hands.
4. Keep your hands lower than your elbows and your fingertips down. Rub hands together and fingers between each other to create a lather. Lather all surfaces of wrists, hands, and fingers, using friction for at least 20 seconds (Fig. 2-27).
   Lather and friction loosen skin oils and allow pathogens to be rinsed away.

Fig. 2-27. *Using friction for at least 20 seconds, lather all surfaces of your wrists, hands, and fingers.*

5. Clean your fingernails by rubbing them in the palm of your other hand.
   Most pathogens on hands are under the nails.
6. Keep your hands lower than your elbows and your fingertips down. Being careful not to touch the sink, rinse thoroughly under running water. Rinse all surfaces of your wrists and hands. Run water down from your wrists to your fingertips. Do not run water over unwashed arms down to clean hands.
   Water should run from cleanest to dirtiest. Wrists are cleanest; fingertips are dirtiest.
7. Use a clean, dry paper towel to dry all surfaces of your fingers, hands, and wrists, starting at the fingertips. Do not wipe the towel on unwashed forearms and then wipe your clean hands. Discard the towel in the waste container without touching the container. If your hands touch the sink or wastebasket, start over.
8. Use a clean, dry paper towel to turn off the faucet (Fig. 2-28). Discard the towel in the waste container. Do not contaminate your hands by touching the surface of the sink or faucet.
   Hands will be recontaminated if you touch the dirty faucet or sink with clean hands.

Fig. 2-28. *Use a clean, dry paper towel to turn off the faucet, so that you do not contaminate your hands.*

Personal Protective Equipment

Personal protective equipment (**PPE**) is equipment that helps protect employees from serious injuries or illnesses resulting from contact with workplace hazards. In care facilities, PPE helps protect nursing assistants from contact with potentially infectious material. Employers are responsible for providing NAs with the appropriate PPE to wear. OSHA requires that PPE be readily available in a variety of sizes. It must be easy to access.

Personal protective equipment includes gowns, masks, goggles, face shields, and gloves. Gowns protect the skin and/or clothing. Masks protect the mouth and nose. Goggles protect the eyes. Face shields protect the entire face—the eyes, nose, and mouth. Gloves protect the hands. Gloves are used most often by all caregivers.

NAs must wear PPE if there is a chance of coming into contact with blood, body fluids, secretions, excretions, mucous membranes, or open wounds. They must put on, or **don**, gowns, masks, goggles, and face shields when splashing or spraying of body fluids or blood could occur. Hand hygiene should be performed before donning PPE and after removing and discarding PPE.

Clean, nonsterile gowns protect exposed skin. They also prevent soiling of clothing. Gowns should fully cover the torso. They should fit comfortably over the body, and have long sleeves that fit snugly at the wrists.

Gowns can be worn only once before they need to be discarded. OSHA requires fluid-resistant gowns if fluid penetration is likely. If a gown becomes wet or soiled during care, it should be discarded and a new gown should be donned. When finished with a procedure, NAs should remove, or **doff**, the gown as soon as possible and wash their hands.

Gowns may have ties at the neck and waist and are donned by placing the arms through the sleeves before fastening the ties. Over-the-head gowns are another style. They are donned over the head and may be tied at the waist. This skill shows donning a gown with ties at the neck and waist.

Putting on (donning) and removing (doffing) gown

1. Wash your hands.
2. Open the gown. Hold it out in front of you and allow it to open/unfold (Fig. 2-29). Do not shake the gown or touch it to the floor. Facing the back opening of the gown, place an arm through each sleeve.
3. Fasten the neck opening.
4. Reach behind you. Pull the gown until it completely covers your clothing. Secure the gown at your waist (Fig. 2-30).

Fig. 2-29. Let the gown unfold without shaking it.

Fig. 2-30. Reaching behind you, secure the gown at the waist.

5. Put on your gloves after putting on the gown. The cuffs of the gloves should overlap the cuffs of the gown (Fig. 2-31).

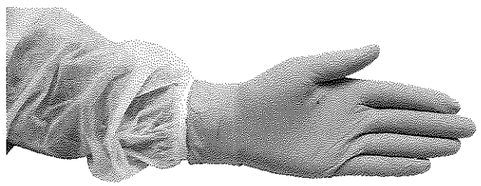

Fig. 2-31. The cuffs of the gloves should overlap the cuffs of the gown.

6. When removing a gown, remove and discard gloves properly (see procedure later in the chapter). Unfasten the gown at the waist and neck. Remove the gown without touching the outside of the gown. Roll the dirty side in, while holding the gown away from your body. Discard the gown and wash your hands.
   Rolling puts dirtiest surface inward, lessening the risk of contamination.

Masks can prevent inhalation of microorganisms through the nose or mouth. Masks should be worn when caring for residents with respiratory illnesses. They should also be worn when it is likely that contact with blood or body fluids may occur. Masks may be required all of the time in a facility during times of high virus transmission (e.g., COVID surges, which are discussed later in the chapter). Sometimes special masks (respirators) are required for certain diseases, such as tuberculosis. Masks should fully cover the nose and mouth and prevent fluid penetration. Masks should fit snugly over the nose and mouth.

Masks can be worn only once before they need to be discarded. Masks that become wet or soiled must be changed immediately without touching the outside of the soiled mask. NAs must always change their masks when moving between residents. The same mask should not be worn from one resident to another.

Goggles provide protection for the eyes. Goggles are worn with a mask and are used whenever it is likely that blood or body fluids may be splashed or sprayed into the eye area or into the eyes. Eyeglasses alone do not provide proper eye protection. Goggles should fit snugly over and around the eyes or eyeglasses.

Putting on (donning) mask and goggles

1. Wash your hands.
2. Pick up the mask by the top strings or elastic strap. Do not touch the mask where it touches your face.
3. Pull the elastic strap over your head, or if the mask has strings, tie the top strings first, then the bottom strings. Do not wear a mask hanging from only the bottom ties or straps.
4. Pinch the metal strip at the top of the mask (if part of the mask) tightly around your nose so that it feels snug (Fig. 2-32). Fit the mask snugly around your face and below the chin.

Fig. 2-32. Adjust the metal strip until the mask fits snugly around your nose.

5. Place the goggles over your eyes or eyeglasses. Use the headband or earpieces to secure them to your head. Make sure they are on snugly.
6. Put on gloves after putting on the mask and goggles.

Face shields may be worn when blood or body fluids may be splashed or sprayed into the eyes or eye area. A face shield can be substituted for a mask or goggles, or it can be worn with a mask. The face shield should cover the forehead, go below the chin, and wrap around the sides of the face. The headband secures it to the head.

Nonsterile gloves are used for basic care. They are available in different sizes, and may be made of nitrile, vinyl, or latex. However, due to allergy issues, some facilities have banned the use of latex gloves.

Gloves should fit the hands comfortably and should not be too loose or too tight. Facilities have specific policies for when to wear gloves. NAs must learn and follow these rules. Gloves must always be worn for the following tasks:

- Any time an NA might come into contact with blood or any body fluid, secretions, excretions, open wounds, or mucous membranes
- When performing or helping with mouth care or care of any mucous membrane
- When performing or helping with **perineal care** (care of the genital and anal area)
- When performing personal care on **nonintact skin**—skin that is broken by abrasions, cuts, rashes, acne, pimples, lesions, surgical incisions, or boils
- When the NA has sores or cuts on her hands
- When shaving a resident
- When disposing of soiled bed linens, gowns, dressings, and pads
- When touching surfaces or equipment that either is visibly contaminated or may be contaminated

Disposable gloves can only be worn once. They cannot be washed or reused. Gloves should be changed immediately if they become wet, worn, soiled, or torn. Gloves should also be changed before contact with mucous membranes or broken skin. After removing gloves, the NA should wash his hands before donning new gloves. Nonintact areas on the hands should be covered with bandages or gauze before putting on gloves.

Putting on (donning) gloves

1. Wash your hands.
2. If you are right-handed, slide one glove on your left hand (reverse if left-handed).
3. Using your gloved hand, slide the other hand into the second glove.
4. Interlace your fingers. Smooth out folds and create a comfortable fit.
5. Carefully look for tears, holes, cracks, or spots. Replace the glove if needed.
6. Adjust the gloves until they are pulled up over your wrists and fit correctly. If wearing a gown, pull the cuffs of the gloves over the sleeves of the gown (Fig. 2-33).

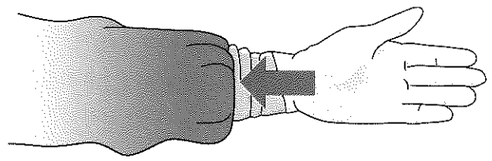

Fig. 2-33. Adjust gloves until they are pulled up over the sleeves of the gown.

Gloves should be removed promptly after use, and the NA should wash his hands directly after removing gloves. He should be careful not to contaminate his skin or clothing when removing gloves. Gloves are worn to protect the skin from becoming contaminated. After giving care, gloves are contaminated. If an NA opens a door with the gloved hand, the doorknob becomes contaminated. Later, anyone who opens the door with an ungloved hand will be touching a contaminated surface. Before touching surfaces or leaving residents' rooms, the NA must remove gloves and wash his hands. Afterward, new gloves can be donned if needed.

Removing (doffing) gloves ▶

1. Touch only the outside of one glove. With one gloved hand, grasp the other glove at the palm and pull the glove off (Fig. 2-34).

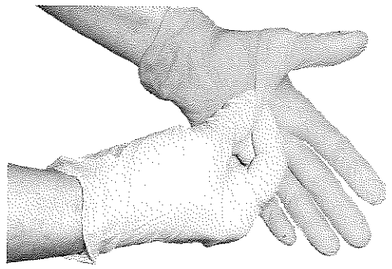

Fig. 2-34. Grasp the glove at the palm and pull it off.

2. With the fingertips of your gloved hand, hold the glove you just removed. With your ungloved hand, slip two fingers underneath the cuff of the remaining glove at the wrist. Do not touch any part of the outside of the glove (Fig. 2-35).
The outside of the glove is contaminated.

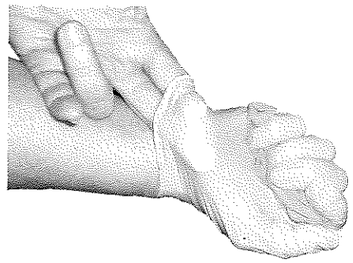

Fig. 2-35. Reach inside the glove at the wrist, without touching any part of the outside of the glove.

3. Pull down, turning this glove inside out and over the first glove as you remove it.
4. You should now be holding one glove from its clean inner side. The other glove should be inside it.
5. Drop both gloves into the proper container without contaminating yourself.
6. Wash your hands.

This is the correct order that the NA should follow when donning (putting on) PPE:

1. Wash your hands.
2. Put on a gown.
3. Put on a mask.
4. Put on goggles or a face shield.
5. Put on gloves.

This is the correct order that the NA should follow when doffing (removing) PPE:

1. Remove and discard gloves.
2. Remove goggles or face shield.
3. Remove and discard the gown.
4. Remove and discard the mask.
5. Wash your hands. Washing hands is always the final step after removing and discarding PPE.

Equipment and Linen Handling

In health care, an object is called **clean** if it has not been contaminated with pathogens. An object that is **dirty** has been contaminated with pathogens. Facilities have special rooms or areas for clean and dirty items. There are separate rooms for supplies that are considered clean and for supplies that are considered dirty or contaminated. NAs will be told where these rooms are located and what types of equipment and supplies are found in each room. NAs should wash their hands before entering clean rooms and before leaving dirty rooms. This helps prevent the spread of pathogens.

Guidelines: Handling Equipment, Linen, and Clothing

- Handle all equipment in a way that prevents
  - Skin/mucous membrane contact
  - Contamination of your clothing
  - Transfer of disease to other residents or areas
- Do not use reusable equipment again until it has been properly cleaned and reprocessed. **Sterilization** is a cleaning measure that destroys all microorganisms, including those that form spores. Sterilization is part of surgical asepsis. It uses steam under pressure, dry heat, or liquid or gas chemicals to sterilize. Items that need to be sterilized are ones that go directly into the bloodstream or into other normally sterile areas of the body (for example, surgical instruments). **Disinfection** is a process that destroys most, but not all, pathogens. It reduces the pathogen count to a level that is considered not infectious. Disinfection is carried out with pasteurization or chemical germicides. Examples of items that are usually disinfected are reusable oxygen tanks, wall-mounted blood pressure cuffs, and any reusable care equipment.
- Dispose of all single-use, or disposable, equipment properly. **Disposable** means it is discarded after one use. Disposable razors are examples of disposable equipment.
- Clean and disinfect
  - All environmental surfaces
  - Beds, bed rails, and all bedside equipment
  - All frequently touched surfaces (such as doorknobs and call lights)
- Handle, transport, and process soiled linens and clothing in a way that prevents
  - Skin and mucous membrane exposure
  - Contamination of clothing (Hold linen and clothing away from your uniform.)
  - Transfer of disease to other residents and areas (Do not shake linen or clothes. Fold or roll linen so that the dirtiest area is inside. Do not put soiled linen on floor.)
- Bag soiled linen at point of origin.
- Sort soiled linen away from resident care areas.
- Place wet linen in leakproof bags.

More information about cleaning equipment and supplies is in Chapter 7.

Spills

Spills can pose a serious risk of infection and can put residents and staff at risk for falls. The housekeeping department may be responsible for cleaning spills. If NAs must clean spills, there are general guidelines to follow.

Guidelines: Cleaning Spills Involving Blood, Body Fluids, or Glass

- Don gloves before starting. In some cases, special heavy-duty gloves are best.
- First, absorb the spill with whatever product is used by the facility. It may be an absorbing powder.

- Scoop up the absorbed spill, and dispose of it in a designated container.
- Apply the proper disinfectant to the spill area and allow it to stand wet for a minimum of 10 minutes (follow directions on the label).
- Clean up spills immediately with the proper cleaning solution.
- Do not pick up any pieces of broken glass, no matter how large, with your hands. Use a dustpan and broom or other tools.
- Waste containing broken glass, blood, or body fluids should be properly bagged. Waste containing blood or body fluids may need to be placed in a special biohazard waste bag. Follow facility policy.

Transmission-Based Precautions

These precautions are used for persons who are infected or may be infected with certain diseases. These precautions are called **Transmission-Based Precautions**. When ordered, these precautions are used in addition to Standard Precautions. These precautions will always be listed in the care plan and on the assignment sheet. Following these precautions promotes the NA's safety, as well as the safety of others.

There are three categories of Transmission-Based Precautions: Airborne Precautions, Droplet Precautions, and Contact Precautions. The category used depends on the pathogen or disease and how it spreads. They may also be used in combination for diseases that have multiple routes of transmission.

Airborne Precautions prevent the spread of pathogens that can be transmitted through the air after being expelled (Fig. 2-36). The pathogens are able to remain floating for some time. An example of an airborne disease is tuberculosis. Precautions include wearing special masks, such as N95 or HEPA respirators, to avoid being infected.

Fig. 2-36. *Airborne Precautions are used for diseases that can be transmitted through the air.* (IMAGE COURTESY OF THE NORTH CAROLINA STATEWIDE PROGRAM FOR INFECTION CONTROL AND EPIDEMIOLOGY [SPICE], UNC, CHAPEL HILL, SPICE.UNC.EDU)

Droplet Precautions are used for diseases that are spread by droplets in the air. Droplets normally do not travel more than 6 feet. Coughing, sneezing, talking, laughing, singing, or suctioning can spread droplets (Fig. 2-37). An example of a droplet disease is influenza (flu). Precautions include wearing a face mask during care and restricting visits from uninfected people. NAs should cover their noses and mouths with a tissue when they sneeze or cough. They should ask others to do the same. Used tissues should be disposed of in the nearest waste container. Used tissues should not be placed in a pocket for later use. If a tissue is not available, NAs should cough or sneeze into their upper sleeve or elbow, not their hands. They should wash their hands immediately afterward. Residents should wear masks when being moved from room to room.

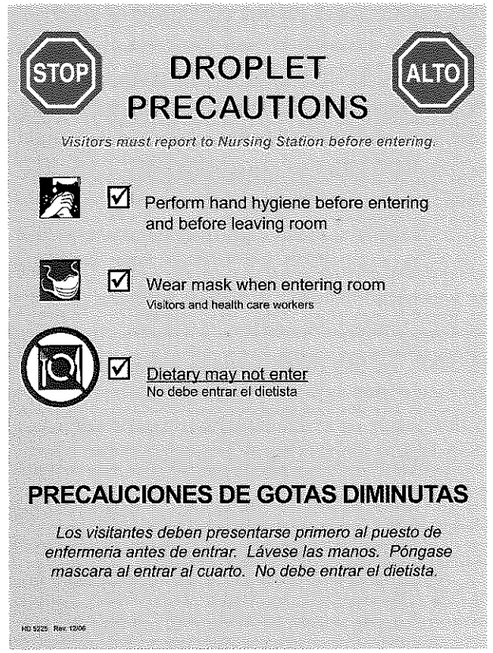

Fig. 2-37. *Droplet Precautions are followed when the disease-causing microorganism does not remain in the air.* (IMAGE COURTESY OF THE NORTH CAROLINA STATEWIDE PROGRAM FOR INFECTION CONTROL AND EPIDEMIOLOGY [SPICE], UNC, CHAPEL HILL, SPICE.UNC.EDU)

Contact Precautions are used when the resident may spread an infection by direct contact with a person or object. The infection can be spread by touching a contaminated area on the resident's body or her blood or body fluids (Fig. 2-38). It may also be spread by touching contaminated items, linen, equipment, or supplies. Conjunctivitis (pink eye) and *Clostridioides difficile* (*C. diff*) infection are examples of situations that require Contact Precautions. Precautions include wearing gloves and a gown and resident isolation. Contact Precautions require washing hands with soap and not touching infected surfaces with ungloved hands or uninfected surfaces with contaminated gloves. Staff often refer to residents who need Transmission-Based Precautions as being "in isolation." A sign should be on the door indicating *Isolation* or *Contact Precautions* and alerting people to see the nurse before entering the room.

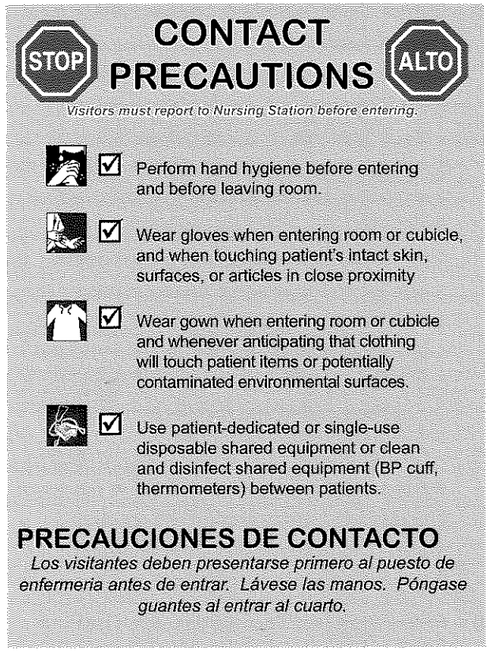

Fig. 2-38. *Contact Precautions are followed when the person may spread a microorganism by touching an object or person.* (IMAGE COURTESY OF THE NORTH CAROLINA STATEWIDE PROGRAM FOR INFECTION CONTROL AND EPIDEMIOLOGY [SPICE], UNC, CHAPEL HILL, SPICE.UNC.EDU)

Guidelines: Isolation

- When they are indicated, Transmission-Based Precautions are always used **in addition** to Standard Precautions.
- You will be told the proper PPE to wear for care of each resident in isolation. Make sure to put on the PPE properly and remove it safely. Remove PPE and place it in the appropriate container before exiting a resident's room. PPE cannot be worn outside the resident's room, except for a respirator, which is removed after leaving the room and closing the door. Perform hand hygiene following the removal of PPE and again after exiting the resident's room. In addition to handwashing areas within the resident's room, there may be an alcohol-based hand rub dispenser mounted on the wall inside the room as you exit.

- Do not share equipment between residents. Use disposable supplies that can be discarded after use whenever possible. Use dedicated (only for use by one resident) equipment when disposable is not an option. When using disposable supplies, discard them in the resident's room before leaving. Be careful not to contaminate reusable equipment by setting it on furniture or counters in the resident's room. When the resident no longer needs the additional precautions, properly discard dedicated equipment if required. If the dedicated equipment is to be used for other residents, it should be cleaned and disinfected after use.
- Wear the proper PPE, if indicated, when serving food and drink to residents. Do not leave uneaten food uncovered in the resident's room. When the meal is completed, remove the meal tray. Take it to the proper area.
- Follow Standard Precautions when dealing with body waste removal. Wear gloves when touching or handling waste. Wear gowns and goggles when indicated. The waste must be disposed of in such a manner as to minimize splashing and spraying.
- If required to take a specimen from a resident in isolation, wear the proper PPE. Collect the specimen. Place it in the appropriate container without the outside of the container coming into contact with the specimen. Properly remove your PPE and dispose of it in the room. Perform hand hygiene before leaving the room. Take the specimen to the nurse.
- Residents need to feel that staff understand what they are going through. Listen to what residents are saying. Allow time to talk with them about their concerns. Reassure residents. Explain why these steps are being taken. Relay any requests outside your scope of practice to the nurse.

Common Infectious Diseases

Bloodborne pathogens are microorganisms found in human blood. They can cause infection and disease in humans. They may also be found in certain other body fluids, draining wounds, and mucous membranes. These pathogens are transmitted by infected blood entering the bloodstream, or if infected semen or vaginal secretions contact mucous membranes. Having sexual contact with someone carrying a bloodborne disease can also transmit the disease. Sexual contact includes sexual intercourse (vaginal and anal), contact of the mouth with the genitals or anus, and contact of the hands with the genital area. Sharing infected drug needles can also spread bloodborne diseases. Infected pregnant women may transmit bloodborne diseases to their babies in the womb or at birth.

In health care, contact with infected blood or body fluids is the most common way to be infected with a bloodborne disease. Infections can be spread through contact with contaminated blood or body fluids, needles or other sharp objects, or contaminated supplies or equipment. Standard Precautions, handwashing, isolation, and PPE are all ways to prevent transmission of bloodborne diseases. Employers are required by law to help prevent exposure to bloodborne pathogens. Following Standard Precautions and other procedures helps protect caregivers from bloodborne diseases.

Two major bloodborne diseases in the United States are acquired immunodeficiency syndrome (AIDS) and the viral hepatitis family. Chapter 4 has more information about AIDS.

Hepatitis is inflammation of the liver caused by certain viruses and other factors, such as alcohol abuse, some medications, and trauma. Liver function can be permanently damaged by hepatitis. It can lead to other chronic, lifelong illnesses. Several different viruses can cause hepatitis. The most common types of hepatitis are A, B, and C. Hepatitis B and C are bloodborne diseases that can cause death.

Hepatitis B (HBV) is spread through sexual contact, by sharing infected needles, and from a mother to her baby during delivery. It can be spread through improperly sterilized needles used for tattoos and piercings and through grooming supplies such as razors and toothbrushes. It is also spread by exposure at work from accidental contact with infected needles or other sharps or from splashing blood. HBV is a threat to healthcare workers. Employers must offer NAs a free vaccine to protect them from hepatitis B. The HBV vaccine is usually given as a series of three shots. Prevention is the best option for dealing with this disease. Employees should take the vaccine when it is offered. Hepatitis C (HCV) is also transmitted through blood or body fluids. Hepatitis C can lead to cirrhosis and liver cancer and can even cause death. There is no vaccine for hepatitis C.

Other serious infections include the following:

Tuberculosis, or **TB**, is a highly contagious disease. It is caused by a bacterium that is carried on mucous droplets suspended in the air. The bacteria usually affect the lungs, which is known as *pulmonary tuberculosis*. TB is an airborne disease. When a person infected with TB talks, coughs, breathes, sings, laughs, or sneezes, he may spread the disease. Tuberculosis causes coughing, trouble breathing, weight loss, and fatigue (Fig. 2-39). Other symptoms include chest pain, coughing up blood, loss of appetite, slight fever, chills, and night sweats. Usually TB can be cured by taking all prescribed medication. However, if left untreated, it may cause death.

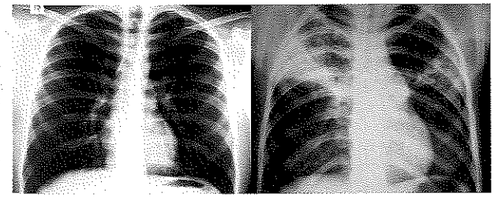

Fig. 2-39. *A normal lung X-ray on the left, and an X-ray of a lung with TB on the right.*

When caring for residents who have TB, NAs should follow Standard Precautions and Airborne Precautions. They should use personal protective equipment as instructed. Special masks (respirators), such as N95 or high efficiency particulate air (HEPA), must be used. NAs must take care when handling sputum. Residents will be placed in a special airborne infection isolation room (AIIR). These rooms have a controlled flow of air. The door to this type of room should remain closed except when entering or exiting the room. The door should not be opened or closed quickly. This pulls contaminated room air into the hallway. NAs must follow isolation procedures if directed. They should help the resident remember to take all medication prescribed. Failure to do so is a major factor in the spread of TB.

COVID-19 (coronavirus disease) is a droplet and airborne disease. It is transmitted through droplets and particles produced when the infected person breathes, sneezes, coughs, sings, or talks. It may be more likely to spread among people who are in close contact, within 6 feet of one another. However, inhalation of the virus in the air can also occur at distances greater than 6 feet. Aerosol particles can move through an indoor space and can linger for some time even after an infected person has left the area. Enclosed spaces with poor ventilation increase the risk of infection, as do crowded spaces and prolonged exposure.

Signs and symptoms of COVID-19 include fever, chills, cough, fatigue, and shortness of breath. Muscle aches, sore throat, loss of taste or smell, nausea or vomiting, diarrhea, and headache are also symptoms. Some people experience mild symptoms, while others have severe symptoms that require hospitalization, medication, and the use of a ventilator (a machine that assists with or replaces breathing when a person cannot breathe on his own). The disease can also result in death.

People may be infected with COVID-19 for 2 to 14 days before developing symptoms. However, studies suggest that people can be infected and not show any symptoms. People who are at a higher risk for serious complications and death from this disease include older adults, people of any age with certain underlying medical conditions, and people who are unvaccinated.

Several vaccines have been approved for preventing or reducing the severity of COVID-19. The vaccine may be available as a series of two shots, spaced several weeks apart, or may be available as a single dose. Additional doses (booster shots) may be administered after a person has completed their vaccine series. The CDC encourages everyone to remain up-to-date with all recommended COVID-19 vaccine doses.

Long-term care facilities must follow federal and state guidelines, so policies may change as new information becomes available. Current CDC guidelines state residents must be monitored daily to see if they have any COVID-19 symptoms. Testing may be performed regularly on all residents and staff or may be performed when a person has symptoms or is exposed to a positive case. Rapid tests, sometimes called *antigen tests,* give results within minutes but are not always accurate. *PCR tests* are usually sent to a lab and take longer to process, but the results are more likely to be accurate. Residents who have this disease will be separated from those who do not. Ideally certain nurses and NAs will be assigned to work only with residents who have COVID-19.

Guidelines: COVID-19

- Follow Standard Precautions and Transmission-Based Precautions.
- All residents need to be monitored daily, whether or not they have been diagnosed with COVID-19. Measure vital signs as ordered and report changes to the supervisor immediately. You may be asked to obtain a pulse oximeter reading (see Chapter 7). Report anything that the resident tells you about his symptoms.
- Wear full PPE (gown, gloves, eye protection, and an N95 or other respirator) when caring for residents with suspected or known COVID-19 infections. The N95 respirator should cover your nose and mouth. During outbreaks, you may be required to wear a mask all the time while you are in the facility.
- Residents who test positive for COVID-19 will be asked to stay in their rooms unless they must leave to receive essential medical care. The door should be kept closed. When you are in a resident's room, maintain a distance of at least 6 feet when possible.
- If residents are in an airborne infection isolation room (AIIR), keep the doors closed except when entering or exiting the room. When entering this room, do not open or close the door quickly. This pulls contaminated room air into the hallway.
- Use disposable supplies that can be discarded after use whenever possible. Use dedicated (only for use by one resident) equipment when disposable is not an option.
- Do not share any personal items among residents.
- Wash your hands often. Use soap and running water and scrub for at least 20 seconds. If soap and water is not available, use a hand sanitizer that contains at least 60% alcohol.
- A resident with known or suspected COVID-19 infection must wear a mask when she is near other people. As long as COVID-19 spread remains a concern, all residents should cover their noses and mouths with masks when staff members are in their rooms. This applies even when residents do not have COVID-19 or any symptoms.
- Clean frequently touched surfaces with the proper cleaning spray or wipes.
- Encourage residents with COVID-19 to rest and drink fluids to maintain hydration.
- Do not touch your eyes, nose, or mouth.
- Do not go to work if you feel sick or have a fever. Facilities have policies for evaluating healthcare personnel who have symptoms of COVID-19, as well as for those who were exposed to someone who has COVID-19. They also have rules about when employees can return to work after having a COVID-19 infection. Follow facility policy.
- For many people, symptoms improve within a week, but it is important to report any signs and symptoms that indicate the illness is getting worse:
  - Difficulty breathing
  - Persistent pain or pressure in the chest
  - Confusion
  - Difficulty waking or remaining alert
  - Prolonged elevated temperature
  - Bluish, gray, or unusually light lips or face

Staphylococcus aureus is a common type of bacteria that can cause infection. Methicillin is a powerful antibiotic often used in healthcare facilities. Methicillin-resistant *Staphylococcus aureus,* or **MRSA**, is a strain of this bacterium that has developed resistance to methicillin. Resistance means that drugs no longer work to kill the specific bacteria. This type of MRSA is also known as *HA-MRSA,* which stands for hospital-associated MRSA. Community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) is a type of MRSA infection that occurs in people who have not recently been admitted to healthcare facilities and who have no past diagnosis of MRSA. Often CA-MRSA manifests as skin infections, such as boils or pimples. This type of infection is becoming more common.

MRSA is almost always spread by direct physical contact with infected people. This means if a person has MRSA on his skin, especially on his hands, and touches another person, he may spread MRSA. Spread also occurs through indirect contact by touching equipment or supplies (for example, sheets or wound dressings) contaminated by a person with MRSA.

Symptoms of MRSA infection include drainage, fever, chills, and redness. NAs can help prevent the spread of MRSA by practicing proper hygiene. Handwashing, using soap and water, is the single most important measure to control the spread of MRSA. NAs must always follow Standard Precautions, along with Transmission-Based Precautions as ordered. Cuts and abrasions should be kept clean and covered with a proper dressing (e.g., bandage) until healed. Contact with other people's wounds or material that is contaminated from wounds should be avoided.

Enterococci are bacteria that live in the digestive and genital tracts. Although they normally do not cause problems in healthy people, they can sometimes cause infection. Vancomycin is a powerful antibiotic used to treat infections caused by enterococci. If the enterococci become resistant to vancomycin, then it is called vancomycin-resistant *Enterococcus,* or **VRE**.

VRE is spread through direct and indirect contact. Symptoms of VRE infection include fever, fatigue, chills, and drainage. VRE infections are often difficult to treat and may require several medications. VRE infections can cause life-threatening infections in those with weak immune systems—the very young, the very old, and the very ill. Preventing VRE is much easier than trying to treat it. Proper hand hygiene can help prevent the spread of VRE. NAs should wash their hands often and wear PPE as directed. NAs must always follow Standard Precautions, along with Transmission-Based Precautions as ordered. Items may need to be disinfected. That information should be listed in the care plan.

Clostridioides difficile (formerly known as *Clostridium difficile*) infection (CDI) infection is commonly known as *C. diff* or *C. difficile.* It is a spore-forming bacterium which can be part of the normal intestinal flora. When the normal intestinal flora is altered, *C. difficile* can flourish in the intestinal tract and can cause infection. It produces a toxin that causes a watery diarrhea. Enemas, nasogastric tube insertion, and GI tract surgery increase a person's risk of developing

the infection. The elderly are at a higher risk of getting *C. difficile* infection. The overuse of antibiotics may also alter the normal intestinal flora and increase the risk of developing *C. difficile.* It can also cause colitis, a more serious intestinal condition.

When released in the environment, *C. difficile* can form a spore that makes it difficult to kill. These spores can be carried on the hands of people who have direct contact with infected residents or with environmental surfaces (floors, bedpans, toilets, etc.) contaminated with *C. difficile.* Touching an object contaminated with *C. difficile* can transmit the infection. Alcohol-based hand sanitizer is not considered effective on *C. difficile.* Soap and water must be used each time hand hygiene is performed.

Symptoms of *C. difficile* include frequent, foul-smelling, watery stools. Other symptoms are fever, diarrhea that contains blood and mucus, nausea, lack of appetite, and abdominal cramps. Proper handwashing with soap and water is vital in preventing the spread of the infection. Handling contaminated wastes properly can help prevent its spread. Cleaning surfaces with a proper disinfectant, such as a bleach solution, can also reduce transmission. Limiting the use of antibiotics helps lower the risk of developing *C. difficile* infection.

Employer-Employee Responsibilities

The **employer's** responsibilities for infection prevention include the following:

- Establish infection prevention procedures and an exposure control plan to protect workers
- Provide continuing in-service education on infection prevention and control, including bloodborne and airborne pathogens and updates on any new safety standards
- Have written procedures to follow should an exposure occur, including medical treatment and plans to prevent similar exposures
- Provide personal protective equipment (PPE) for employees to use and teach them when and how to properly use it
- Provide free hepatitis B vaccinations for all employees

The **employee's** responsibilities for infection prevention include the following:

- Follow Standard Precautions
- Follow all facility policies and procedures
- Follow care plans and assignments
- Use provided PPE as indicated or as appropriate
- Take advantage of the free hepatitis B vaccination
- Immediately report any exposure to infection, blood, or body fluids
- Participate in annual education programs covering the prevention of infection