

# Health and Physical Assessment of the Adult Client

## I. ENVIRONMENT/SETTING

- A. Establish a relationship and explain the procedure to the client.
- B. Ensure privacy and make the client feel comfortable (comfortable room temperature, sufficient lighting, remove distractions such as noise or objects, avoid interruptions).
- C. Sit down for the interview (avoid barriers such as a desk), maintain an appropriate social distance, and maintain eye level.
- D. Use therapeutic communication techniques and open-ended questions to obtain information about the client's symptoms and concerns; allow time for the client to ask questions.
- E. Consider religious and cultural characteristics such as language (the need for an interpreter), values and beliefs, health practices, eye contact, and touch.
- F. Keep note-taking to a minimum so the client is the focus of attention.
- G. Types of health and physical assessments (Box 34-1)

## II. HEALTH HISTORY

- A. General state of health: Body features and physical characteristics, body movements, body posture, level of consciousness, nutritional status, speech
- B. Chief complaint and history of present illness (direct client quotes) that directs the client to seek care
- C. Family history: The health status of direct blood relatives as well as the client's spouse
- D. Social history
  - 1. Data about the client's lifestyle with a focus on factors that may impact health.
  - 2. Information about alcohol, drug, and tobacco use; sexual practices; tattoos; body piercing; travel history; and work setting to identify occupational hazards
- E. Domestic violence screening
  - 1. Done to determine if the client is experiencing any form of domestic violence.
  - 2. Conducted during a one-to-one interview with client while obtaining the health history.

## III. MENTAL STATUS EXAM

- A. The mental status can be assessed while obtaining **subjective data** from the client during the health history interview.
- B. Appearance
  - 1. Note appearance, including posture, body movements, dress, and hygiene and grooming.
  - 2. An inappropriate appearance and poor hygiene may be indicative of **depression**, manic disorder, **dementia**, organic brain disease, or another disorder.
- C. Behavior
  - 1. Level of consciousness: Assess alertness and awareness and the client's ability to interact appropriately with the environment.
  - 2. Facial expression and body language: Check for appropriate eye contact and determine whether facial expression and body language are appropriate to the situation; this assessment also provides information regarding the client's mood and affect.
  - 3. Speech: Assess speech pattern for articulation and appropriateness of conversation.
- D. Cognitive level of functioning (Box 34-2)

## IV. PHYSICAL EXAM

- A. Overview
  - 1. Gather equipment needed for the examination.
  - 2. Use the senses of sight, smell, touch, and hearing to collect data.
  - 3. Assessment includes **inspection**, **palpation**, **percussion**, and **auscultation**; these skills are performed one at a time, in this order (except the abdominal assessment).
- B. Assessment techniques
  - 1. **Inspection**
    - a. The first assessment technique, which uses vision and smell senses while observing the client
    - b. Requires good lighting, adequate exposure, and possibly the use of certain instruments such as an otoscope or ophthalmoscope
  - 2. **Palpation**
    - a. Uses the sense of touch; warm the hands before touching the client.

### Box 34-1 Types of Health and Physical Assessments

**Complete assessment:** Includes a complete health history and physical examination and forms a baseline database.

**Focused assessment:** Focuses on a limited or short-term problem, such as the client's complaint.

**Episodic/follow-up assessment:** Focuses on evaluating a client's progress.

**Emergency assessment:** Involves the rapid collection of data, often during the provision of lifesaving measures.

### Box 34-2 The Mental-Status Examination: Cognitive Level of Functioning

**Orientation:** Assess client's orientation to person, place, and time.

**Attention span:** Assess client's ability to concentrate.

**Recent memory:** Assessed by asking the client to recall a recent occurrence (e.g., the means of transportation used to get to the health care agency for the physical assessment).

**Remote memory:** Assessed by asking the client about a verifiable past event (e.g., a vacation).

**New learning:** Used to assess the client's ability to recall unrelated words identified by the nurse; nurse selects four words and asks the client to recall the words 5, 10, and 30 minutes later.

**Judgment:** Determine whether the client's actions or decisions regarding discussions during the interview are realistic.

**Thought processes and perceptions:** The way the client thinks and what the client says should be logical, coherent, and relevant; the client should be consistently aware of reality.

- b. Identify tender areas and palpate them last.
  - c. Start with light palpation to detect surface characteristics, then perform deeper palpation.
  - d. Assess texture, temperature, and moisture of the skin, as well as organ location and size.
  - e. Assess for swelling, vibration or pulsation, rigidity or spasticity, and crepitation.
  - f. Assess for the presence of lumps or masses, as well as the presence of tenderness or pain.
3. **Percussion**
    - a. Involves tapping the client's skin to assess underlying structures and to determine vibrations and sounds related to intensity, duration, pitch, quality, and location.
    - b. Provides information related to the presence of air, fluid, or solid masses as well as organ size, shape and position.
  4. **Auscultation:** Involves listening to sounds produced by the body, such as heart, lung, or bowel sounds

### Box 34-3 Characteristics of Skin Color

**Cyanosis:** Mottled bluish coloration

**Erythema:** Redness

**Pallor:** Pale, whitish coloration

**Jaundice:** Yellow coloration

### Box 34-4 Assessing Capillary Filling Time


Depress the nail bed to produce blanching.

Release and observe for the return of color.

Color will return within 3 seconds if arterial capillary perfusion is normal.

- C. Vital signs
  1. Includes temperature, radial pulse (apical pulse may be measured during the cardiovascular assessment), respirations, blood pressure, pulse oximetry, and presence of pain
  2. Height and weight and nutritional status are also assessed.

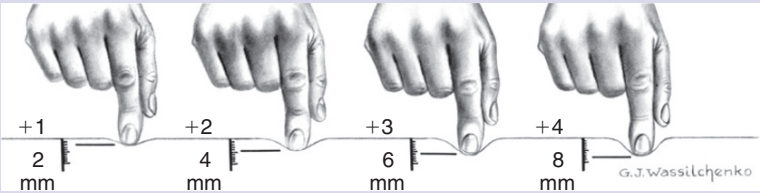
## V. BODY SYSTEMS ASSESSMENT

- A. Integumentary system: Involves **inspection** and **palpation** of skin, hair, and nails.
    1. **Subjective data:** Self-care behaviors, history of skin disease, medications being taken, environmental or occupational hazards and exposure to toxic substances, changes in skin color or pigmentation, change in a mole or a sore that does not heal
    2. **Objective data:** Color, temperature (hypothermia or hyperthermia); excessive dryness or moisture; skin turgor; texture (smoothness, firmness); excessive bruising, itching, rash; hair loss (alopecia) or nail abnormalities such as pitting; lesions (may be inspected with a magnifier and light or with the use of a Wood's light [ultraviolet light used in a darkened room]; scars or birthmarks; edema; capillary filling time (Boxes 34-3 and 34-4; Table 34-1)
-  To test skin turgor, pinch a large fold of skin and assess the ability of the skin to return to its place when released. Poor turgor occurs in severe dehydration or extreme weight loss.
3. Client teaching
    - a. Provide information about factors that can be harmful to the skin, such as sun exposure.
    - b. Encourage performing self-examination of the skin monthly.
- B. Head, neck, and lymph nodes: Involves **inspection** and **palpation** of the head, neck, and lymph nodes
    1. Ask the client about headaches, episodes of dizziness (lightheadedness) or vertigo (spinning



**TABLE 34-1** Pitting Edema Scale


Scale	Description	“Measurement”*
1 +	A barely perceptible pit	2 mm ( $\frac{3}{32}$ in)
2 +	A deeper pit, rebounds in a few seconds	4 mm ( $\frac{9}{32}$ in)
3 +	A deep pit, rebounds in 10-20 seconds	6 mm ( $\frac{1}{4}$ in)
4 +	A deeper pit, rebounds in >30 seconds	8 mm ( $\frac{5}{16}$ in)



\*“Measurement” is in quotation marks because depth of edema is rarely actually measured but is included as a frame of reference.

From Wilson, A., & Giddens, J., (2009). *Health assessment for nursing practice* (4th ed., p. 255). St. Louis: Mosby. Descriptions column data from Kirton, C. Assessing edema, *Nursing* 96 26(7):54, 1996. Illustrations from Canobblo, M. (1990). *Cardiovascular disorders*. St. Louis: Mosby.

- sensation), history of head injury, loss of consciousness, seizures, episodes of neck pain, limitations of range of motion, numbness or tingling in the shoulders, arms, or hands, lumps or swelling in the neck, difficulty swallowing, medications being taken, and history of surgery in the head and neck region.
2. Head
    - a. Inspect and palpate: Size, shape, masses or tenderness, and symmetry of the skull
    - b. Palpate temporal arteries, located above the cheekbone between the eye and the top of the ear.
    - c. Temporomandibular joint: Ask the client to open his or her mouth; note any crepitation, tenderness, or limited range of motion.
    - d. Face: Inspect facial structures for shape, symmetry, involuntary movements, or swelling, such as periorbital edema (swelling around the eyes).
  3. Neck
    - a. Inspect for symmetry of accessory neck muscles.
    - b. Assess range of motion.
    - c. Test cranial nerve XI (spinal accessory nerve) to assess muscle strength: Ask the client to rotate the head forcibly against resistance applied to the side of the chin; also ask the client to shrug the shoulders against resistance.
    - d. Palpate the trachea: It should be midline, without any deviations.
    - e. Thyroid gland: Inspect the neck as the client takes a sip of water and swallows (thyroid tissue moves up with a swallow); palpate using an anterior-posterior approach (usually the normal adult thyroid cannot be palpated); if it is enlarged, auscultate for a bruit.
  4. Lymph nodes
    - a. Palpate using a gentle pressure and a circular motion of the finger pads.
      - b. Begin with the preauricular lymph nodes (in front of the ear); move to the posterior auricular lymph nodes and then downward toward the supraclavicular lymph nodes.
      - c. Palpate with both hands, comparing the two sides for symmetry.
      - d. If nodes are palpated, note their size, shape, location, mobility, consistency, and tenderness.
  5. Client teaching: Instruct the client to notify the health care provider if persistent headache, dizziness, or neck pain occurs, if swelling or lumps are noted in the head and neck region, or if a neck or head injury occurs.
 

 Neck movements are never performed if the client has sustained a neck injury or a neck injury is suspected.
  - C. Eyes: Includes **inspection, palpation**, vision-testing procedures, and the use of an ophthalmoscope
    1. **Subjective data:** Difficulty with vision (e.g., decreased acuity, double vision, blurring, blind spots); pain, redness, swelling, watery or other discharge from the eye; use of glasses or contact lenses; medications being taken; history of eye problems
    2. **Objective data**
      - a. Inspect the external eye structures, including eyebrows, for symmetry; eyelashes for even distribution; eyelids for ptosis (drooping); eyeballs for exophthalmos (protrusion) or enophthalmos (sunken).
      - b. Inspect the conjunctiva (should be clear), sclera (should be white), and lacrimal apparatus (check for excessive tearing, redness, tenderness, or swelling); cornea and lens (should be smooth and clear); iris (should

### Box 34-5 Assessing and Documenting Pupillary Responses

#### Pupillary Light Reflex

Darken the room (to dilate the client's pupils) and ask the client to look forward.

Test each eye.

Advance a light in from the side to note constriction of the same-side pupil (direct light reflex) and simultaneous constriction of the other pupil (consensual light reflex).

#### Accommodation

Ask the client to focus on a distant object (dilates the pupil).

Ask the client to shift gaze to a near object held about 3 inches from the nose.

Normal response includes pupillary constriction and convergence of the axes of the eyes.

#### Documenting Normal Findings: PERRLA

P = pupils

E = equal

R = round

RL = reactive to light

A = reactive to accommodation

be flat, with a round regular shape and even coloration); eyelids, and pupils (Box 34-5)

3. Snellen eye chart
  - a. Position the client in a well-lit spot 20 feet from the chart, with the chart at eye level, and ask the client to read the smallest line that he or she can discern.
  - b. Instruct the client to leave on glasses or leave in contact lenses; if the glasses are for reading only, they are removed because they blur distant vision.
  - c. Test one eye at a time
  - d. Record result using the fraction at the end of the last line successfully read on the chart.
  - e. Normal visual acuity is 20/20 (distance in feet at which the client is standing from the chart/distance in feet at which a normal eye could have read that particular line).
4. Near vision
  - a. Use a hand-held vision screener (held about 14 inches from the eye) that contains various sizes of print or ask the client to read from a magazine.
  - b. Test each eye separately with the client's glasses on or contact lenses in.
  - c. Normal result is 14/14 (distance in inches at which the subject holds the card from the eye/distance in inches at which a normal eye could have read that particular line).
5. Confrontation test
  - a. Used to measure peripheral vision and compare the client's peripheral vision with the nurse's (assuming that the nurse's peripheral vision is normal)
  - b. The client covers one eye and looks straight ahead; the nurse, positioned 2 feet away, covers his or her eye opposite the client's covered eye.
  - c. The nurse advances a finger or other small object in from the periphery from several directions; the client should see the object at the same time the nurse does.
6. Corneal light reflex
  - a. Used to assess for parallel alignment of the axes of the eyes
  - b. Client is asked to gaze straight ahead as the nurse holds a light about 12 inches from the client
  - c. The nurse looks for reflection of the light on the corneas in exactly the same spot in each eye
7. Cover test
  - a. Used to check for slight degrees of deviated alignment
  - b. Each eye is tested separately.
  - c. The nurse asks the client to gaze straight ahead and cover one eye.
  - d. The nurse examines the uncovered eye, expecting to note a steady, fixed gaze
8. Six cardinal positions of gaze
  - a. Used to check for muscle weakness in the eyes
  - b. The client is asked to hold the head steady, then follow movement of an object through the positions of gaze.
  - c. The client should follow the object in a parallel manner with the two eyes.
  - d. Assess for nystagmus, an oscillating movement of the eye, best noted around the iris.
9. Color vision
  - a. Ishihara chart is a tool used to assess color vision; it determines the client's ability to distinguish a pattern of color (a number) in a series of color plates.
  - b. The nurse tests each eye separately and asks the client to identify the number that he or she sees on the chart.
  - c. The ability to read the number correctly depends on the normal functioning of color vision.
10. Examination of the internal structures
  - a. An ophthalmoscope is used to inspect the fundus, including the retina, choroids, optic nerve disc, macula, fovea centralis, and retinal vessels.
  - b. The nurse inspects the size, color, and clarity of the disc, the integrity of the vessels, and the appearance of the macula, and fovea and looks for retinal lesions
  - c. Performed in a darkened room



- d. The client's eyeglasses are removed (contact lenses are left in place)
- e. The nurse and the client face each other with the eyes at the same height, the ophthalmoscope light is switched on, and the lens is rotated to 0.
- f. As the client gazes straight ahead with both eyes open, the nurse (standing about 10 inches from the client and about 25 degrees lateral to the client's central line of vision) shines the light on the pupil.
- g. A bright-orange glow (red reflex) can be seen by the nurse; the nurse slowly moves toward the pupil, focusing on the red reflex.
- h. Rotating the lens on the ophthalmoscope, the nurse brings the internal structures into focus.



#### 11. Client teaching


- a. Instruct the client to notify the health care provider if alterations in vision occur or any redness, swelling, or drainage from the eye is noted.
- b. Inform the client of the importance of regular eye examinations.

#### D. Ears: Includes **inspection, palpation**, hearing tests, and the use of an otoscope

1. **Subjective data:** Difficulty hearing, earaches, drainage from the ears, dizziness, ringing in the ears, exposure to environment noise, use of a hearing aid, medications being taken, history of ear problems or infections
2. **Objective data**
  - a. Inspect and palpate the external ear, noting size, shape, symmetry, skin color, and the presence of pain.
  - b. Inspect the external auditory meatus for size, swelling, redness, discharge, and foreign bodies; some cerumen (ear wax) may be present.
3. Conductive and sensorineural hearing loss
  - a. A conductive hearing loss occurs as a result of a physical obstruction to the transmission of sound waves.
  - b. A sensorineural hearing loss occurs as a result of a pathological process in the inner ear or of the sensory fibers that lead to the cerebral cortex.
4. Voice test
  - a. Used to determine whether hearing loss has occurred
  - b. One ear is tested at a time (the ear not being tested is occluded by the client)
  - c. The nurse stands 1 to 2 feet from the client, covers his or her mouth so that the client cannot read the lips, exhales fully, and softly whispers two-syllable words in the direction of the unoccluded ear; the client points a finger up during the test when the

nurse's voice is heard (a ticking watch may also be used to test hearing acuity).

5. Pure-tone audiometry testing: Provides a precise quantitative measure of hearing by assessing the client's ability to hear sounds of varying frequencies (done by a person skilled in performing audiometry testing)
6. Tuning fork tests
  - a. Used to measure hearing on the basis of air conduction or bone conduction; includes the Weber and Rinne tests
  - b. To activate the tuning fork, the nurse holds the base and lightly taps the tines against the other hand, setting the fork in vibration.
7. Weber test
  - a. Stem of the vibrating tuning fork is placed in the midline of the client's skull and the client is asked if the tone sounds the same in both ears or better in one ear.
  - b. The client hears the tone by bone conduction and the sound should be heard equally in both ears.
8. Rinne test
  - a. Stem of the vibrating tuning fork is placed on the client's mastoid process.
  - b. When the client no longer hears the sound, the tuning fork is quickly inverted and placed near the ear canal; the client should still hear a sound.
  - c. Normally the sound is heard twice as long by way of air conduction (near the ear canal) than by way of bone conduction (at the mastoid process).
9. Otoscopic exam
  - a. An otoscope is used; for best visualization, the largest speculum that fits comfortably into the client's ear canal should be used.
  - b. The nurse asks the client to tilt the head slightly away, to the opposite shoulder; next the nurse pulls the pinna up and back (on an adult or older child), holds the otoscope upside down, and inserts the speculum slightly down and forward, approximately half an inch, into the ear canal.
  - c. The normal tympanic membrane is translucent, shiny, and pearly gray.

 Before performing an otoscopic exam and inserting the speculum, check the auditory canal for foreign bodies. Instruct the client not to move the head during the examination to avoid damage to the canal and tympanic membrane.

#### 10. Client teaching

- a. Instruct the client to notify the health care provider if an alteration in hearing or ear pain or ringing in the ears occurs, or redness, swelling, or drainage from the ear is noted.





- b. Instruct the client in the proper method of cleaning the ear canal.
  - c. The client should cleanse the ear canal with the corner of a moistened washcloth and should never insert sharp objects or cotton-tipped applicators into the ear canal.
- E. Nose, mouth, and throat:** Includes **inspection** and **palpation**
- 1. Subjective data**
    - a. Nose: Ask about discharge or nosebleed (epistaxis); facial or sinus pain; history of frequent colds; altered sense of smell; allergies; medications being taken; history of nose trauma or surgery.
    - b. Mouth and throat: Ask about the presence of sores or lesions; bleeding from the gums or elsewhere; altered sense of taste; toothaches; use of dentures or other appliances; tooth- and mouth-care hygiene habits; at-risk behaviors (e.g., smoking, alcohol consumption); history of infection, trauma, or surgery.
  - 2. Objective data**
    - a. External nose should be midline and in proportion to other facial features.
    - b. Patency of the nostrils can be tested by pushing each nasal cavity closed and asking the client to sniff inward through the other nostril.
    - c. Use of a nasal speculum and penlight or a short, wide-tipped speculum attached to an otoscope head is used to inspect for redness, swelling, discharge, bleeding, or foreign bodies; the nasal septum is assessed for deviation.
    - d. The nurse presses the frontal sinuses (located below the eyebrows) and over the maxillary sinuses (located below the cheekbones); the client should feel firm pressure but no pain.
    - e. The external and inner surfaces of the lips are assessed for color, moisture, cracking, or lesions.
    - f. The teeth are inspected for condition and number (should be white, spaced evenly, straight, and clean, free of debris and decay).
    - g. The alignment of the upper and lower jaw is assessed by having the client bite down.
    - h. The gums are inspected for swelling, bleeding, discoloration, and retraction of gingival margins (gums normally appear pink).
    - i. The tongue is inspected for color, surface characteristics, moisture, white patches, nodules, and ulcerations (dorsal surface is normally rough; ventral surface is smooth and glistening, with visible veins).
    - j. The nurse retracts the cheek with a tongue depressor to check for the buccal mucosa for color and the presence of nodules or lesions; normal mucosa is glistening, pink, soft, moist, and smooth.
  - k. Using a penlight and tongue depressor, the nurse inspects the hard and soft palates for color, shape, texture, and defects; the hard palate (roof of the mouth), which is located anteriorly, should be white and dome-shaped, and the soft palate, which extends posteriorly, should be light pink and smooth.
    - l. The uvula is inspected for midline location; the nurse asks the client to say “ahhh” and watches for the soft palate and uvula to rise in the midline (this tests one function of cranial nerve X, the vagus nerve).
    - m. Using a penlight and tongue depressor, the nurse inspects the throat for color, presence of tonsils, and the presence of exudate or lesions; cranial nerve XII is tested (the hypoglossal nerve) by asking the client to stick out the tongue (should protrude in the midline).
  - 3. Client teaching**
    - a. Emphasize the importance of hygiene and tooth care, as well as regular dental examinations and the use of fluoridated water or fluoride supplements.
    - b. Encourage the client to avoid at-risk behaviors (e.g., smoking, alcohol consumption).
    - c. Stress the importance of reporting pain or abnormal occurrence (e.g., nodules, lesions, signs of infection).
- F. Lungs**
- 1. Subjective data:** Cough; expectoration of sputum; shortness of breath or dyspnea; chest pain on breathing; smoking history; environmental exposure to pollution or chemicals; medications being taken; history of respiratory disease or infection; last tuberculosis test, chest radiograph, pneumonia, and any influenza immunizations including the H1N1 vaccine (H and N refer to *hemagglutinin* and *neuraminidase*, respectively, which are surface antigens, and the number 1 refers to the specific subtype of those antigens).
  - 2. Objective data:** Includes **inspection**, **palpation**, **percussion**, and **auscultation**
  - 3. Inspection** of the anterior and posterior chest: Note skin color and condition and the rate and quality of respirations, look for lumps or lesions, note the shape and configuration of the chest wall, note the position the client takes to breathe.
  - 4. Palpation:** Palpate the entire chest wall, noting skin temperature and moisture and looking for areas of tenderness and lumps, lesions, or masses; assess chest excursion and tactile or vocal fremitus (Box 34-6).
  - 5. Percussion**
    - a. Starting at the apices, percuss across the top of the shoulders, moving to the interspaces, making a side-to-side comparison all the way down the lung area (Fig. 34-1).

### Box 34-6 Palpation of the Chest

#### Chest Excursion

Posterior: The nurse places the thumbs along the spinal processes at the 10th rib, with the palms in light contact with the posterolateral surfaces.

The nurse's thumbs should be about 2 inches apart, pointing toward the spine, with the fingers pointing laterally

Anterior: The nurse places the hands on the anterolateral wall with the thumbs along the costal margins, pointing toward the xiphoid process.

The nurse instructs the client to take a deep breath after exhaling.

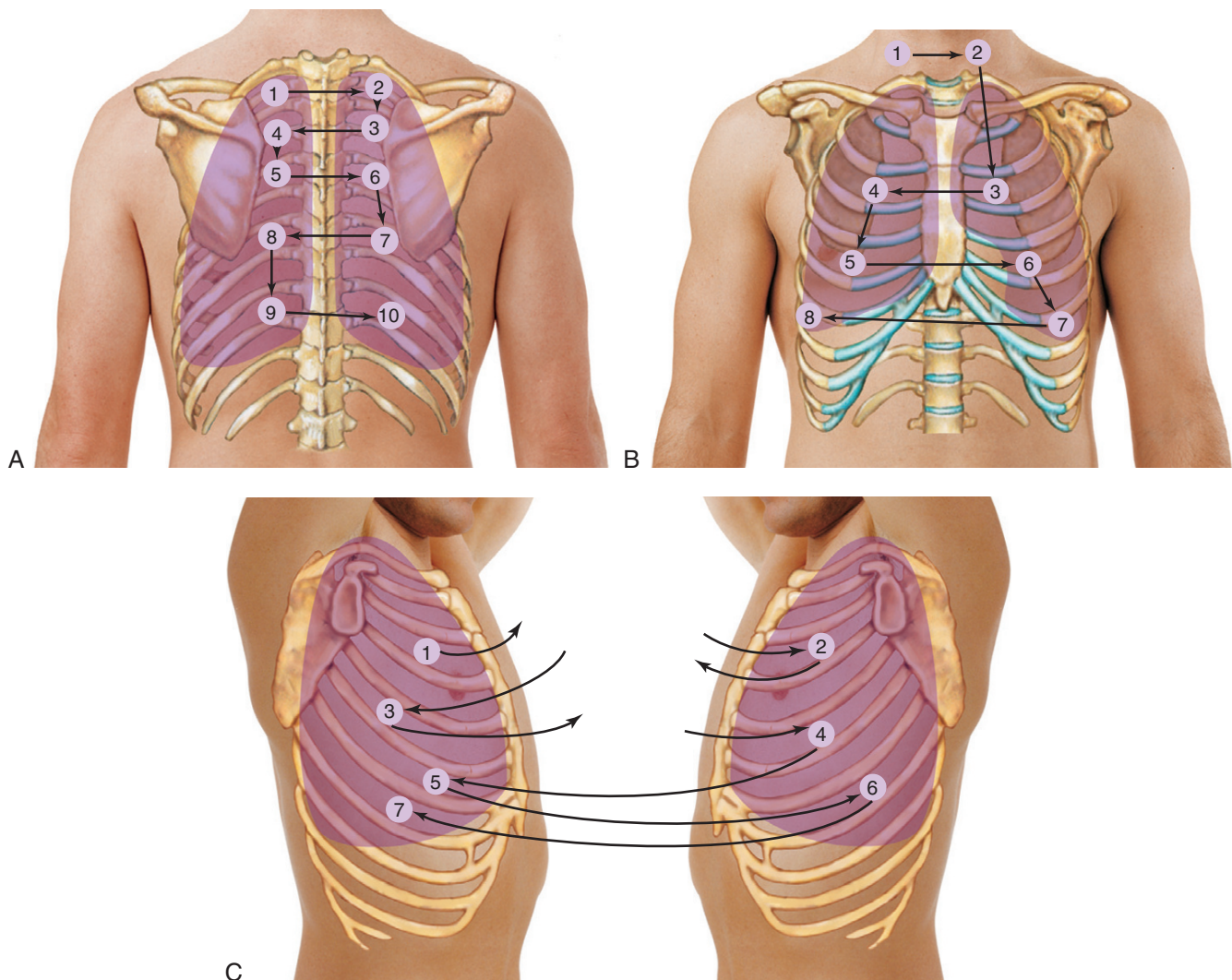
#### Normal Findings

The nurse notes movement of the thumbs.

Chest excursion should be symmetrical, separating the thumbs approximately 2 inches.

#### Tactile or Vocal Fremitus

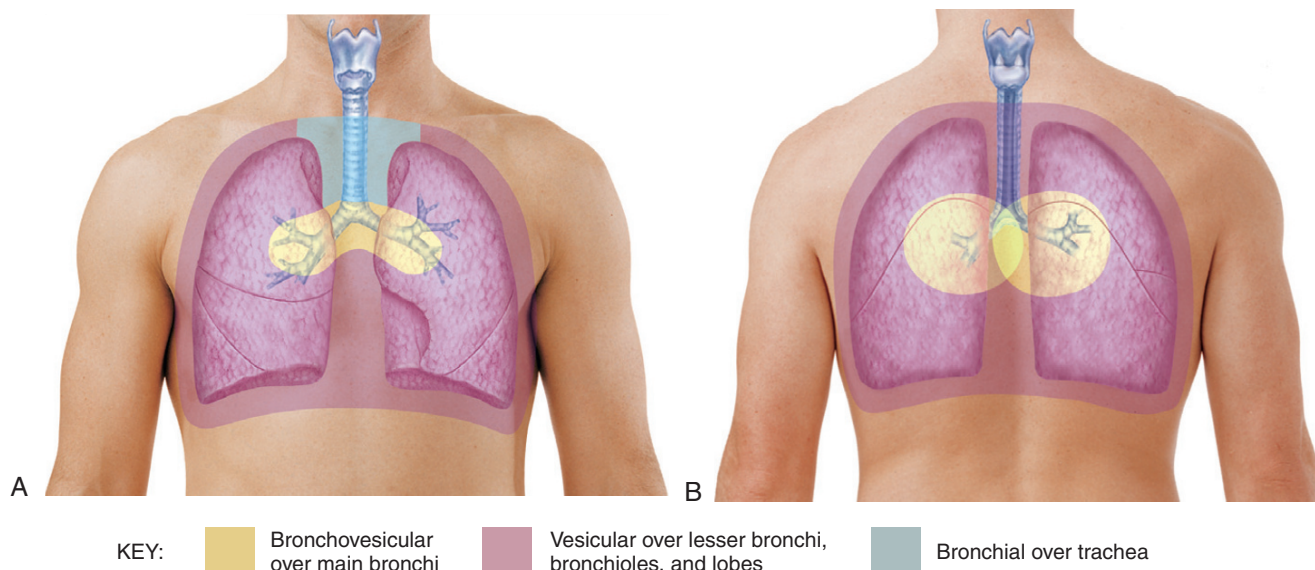
The nurse places the ball or lower palm of the hand over the chest.



**▲ FIGURE 34-1** Landmarks for chest auscultation and percussion. **A**, Posterior view. **B**, Anterior view. **C**, Lateral view. (From Wilson, A. F., & Giddens, J. F. [2009]. *Health assessment for nursing practice* (4th ed., p. 218). St. Louis: Mosby).

- b. Determine the predominant note; resonance is noted in healthy lung tissue.
  - c. Hyperresonance is noted when excessive air is present and a dull note indicates lung density.
6. **Auscultation**
- a. Use the flat diaphragm end piece of the stethoscope, hold it firmly against the chest

- wall, and listen to at least one full respiration in each location (anterior, posterior, and lateral).
- b. Posterior: Start at the apices and move side to side for comparison (see Fig. 34-1)
- c. Anterior: Auscultate the lung fields from the apices in the supraclavicular area down



▲ **FIGURE 34-2** Auscultatory sounds. **A**, Anterior thorax. **B**, Posterior thorax. (From Wilson, A. F., & Giddens, J. F. [2009]. *Health assessment for nursing practice* [4th ed., p. 219]. St. Louis: Mosby).

to the sixth rib; avoid **percussion** and **auscultation** over female breast tissue (displace this tissue) because a dull sound will be produced (see Fig. 34-1).

- d. Compare findings on each side.
  7. Normal breath sounds: Three types of breath sounds are considered normal in certain parts of the thorax, including vesicular, bronchovesicular, and bronchial; breath sounds should be clear to **auscultation** (Fig. 34-2).
  8. Abnormal breath sounds: Also known as adventitious sounds (Table 34-2)
  9. Voice sounds (Box 34-7)
    - a. Performed when a pathological lung condition is suspected
    - b. Auscultate over the chest wall; the client is asked to vocalize words or a phrase while the nurse listens to the chest.
    - c. Normal voice transmission is soft and muffled; the nurse can hear the sound but is unable to distinguish exactly what is being said.
- ⚠ When auscultating breath sounds, instruct the client to breathe through the mouth and monitor the client for dizziness.
10. Client teaching
    - a. Encourage the client to avoid exposure to environmental hazards, including smoking (discuss smoking cessation programs as appropriate).
    - b. Client should undergo periodic examinations as prescribed (e.g., chest x-ray study, tuberculosis skin testing).

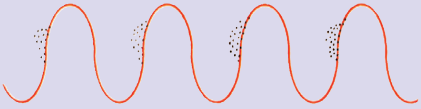
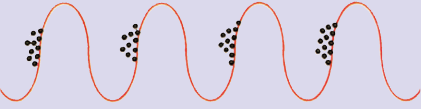




- c. Encourage the client to obtain pneumonia and influenza immunizations.
- d. Health care provider should be notified if client experiences persistent cough, shortness of breath, or other respiratory symptoms.

#### G. Heart and peripheral vascular system

1. **Subjective data:** Chest pain, dyspnea, cough, fatigue, edema, nocturia, leg pain or cramps (claudication), changes in skin color, obesity, medications being taken, cardiovascular risk factors, family history of cardiac or vascular problems, personal history of cardiac or vascular problems
2. **Objective data:** May include **inspection, palpation, percussion, and auscultation**
3. **Inspection:** Inspect the anterior chest for pulsations (apical impulse) created as the left ventricle rotates against the chest wall during systole; not always visible.
4. **Palpation**
  - a. Palpate the apical impulse at the fourth or fifth interspace, or medial to the midclavicular line (not palpable in obese clients or clients with thick chest walls).
  - b. Palpate the apex, left sternal border, and base for pulsations; normally none are present.
5. **Percussion:** May be performed to outline the heart's borders and to check for cardiac enlargement (denoted by resonance over the lung and dull notes over the heart).
6. **Auscultation**
  - a. Areas of the heart (Fig. 34-3)
  - b. Auscultate heart rate and rhythm; check for a pulse deficit (auscultate the apical heartbeat while palpating an artery) if an irregularity is noted.



**TABLE 34-2** Characteristics of Adventitious Sounds

Adventitious Sounds	Characteristics	Clinical Examples
Crackles (previously called <i>rales</i> ) fine crackles 	Fine, high-pitched crackling and popping noises (discontinuous sounds) heard during the end of inspiration. Not cleared by cough.	May be heard in pneumonia, heart failure, asthma, and restrictive pulmonary diseases.
Medium crackles 	Medium-pitched, moist sound heard about halfway through inspiration. Not cleared by cough.	Same as above, but condition is worse.
Coarse crackles 	Low-pitched, bubbling or gurgling sounds that start early in inspiration and extend into the first part of expiration.	Same as above, but condition is worse or may be heard in terminally ill clients with diminished gag reflex. Also heard in pulmonary edema and pulmonary fibrosis.
Wheeze (also called <i>sibilant wheeze</i> ) 	High-pitched, musical sound similar to a squeak. Heard more commonly during expiration, but may also be heard during inspiration. Occurs in small airways.	Heard in narrowed airway diseases such as asthma.
Rhonchi (also called <i>sonorous wheeze</i> ) 	Low-pitched, coarse, loud, low snoring or moaning tone. Actually sounds like snoring. Heard primarily during expiration, but may also be heard during inspiration. Coughing may clear.	Heard in disorders causing obstruction of the trachea or bronchus, such as chronic bronchitis.
Pleural friction rub 	A superficial, low-pitched, coarse rubbing or grating sound. Sounds like two surfaces rubbing together. Heard throughout inspiration and expiration. Loudest over the lower anterolateral surface. Not cleared by cough.	Heard in individuals with pleurisy (inflammation of the pleural surfaces).

From Wilson, A. F., & Giddens, J. F. (2009). *Health assessment for nursing practice* (4th ed., p. 221). St. Louis: Mosby.

### Box 34-7 Voice Sounds

#### Bronchophony

Ask the client to repeat the words “ninety-nine.” Normal voice transmission is soft, muffled, and indistinct.

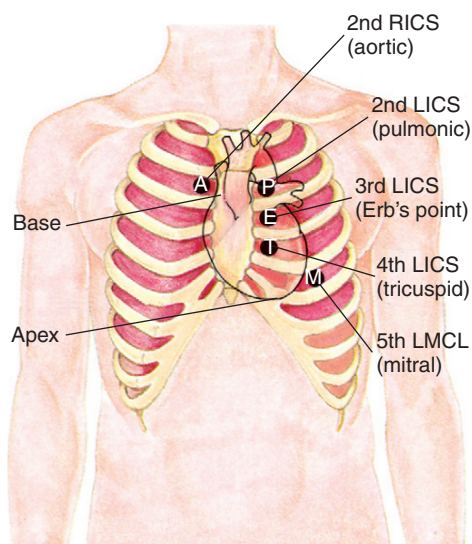
#### Egophony

Ask the client to repeat a long “ee-ee-ee” sound. Normally the nurse would hear the “ee-ee-ee” sound.

#### Whispered Pectoriloquy

Ask the client to whisper the word “ninety-nine.” Normal voice transmission is faint, muffled, and almost inaudible.

- c. Assess S1 (“lub”) and S2 (“dub”) sounds, and listen for extra heart sounds, as well as the presence of murmurs (gentle, blowing or swooshing noise).
7. Peripheral vascular system
  - a. Assess adequacy of blood flow to the extremities by palpating arterial pulses for equality and symmetry and checking the condition of the skin and nails.
  - b. Check for pretibial edema and measure calf circumference (see Table 34-1).
  - c. Measure blood pressure.
  - d. Palpate superficial inguinal nodes (using firm but gentle pressure), beginning in the inguinal area and moving down toward the inner thigh.
  - e. An ultrasonic stethoscope may be needed to amplify the sounds of a pulse wave if the pulse cannot be palpated.
  - f. Carotid artery: Located in the groove between the trachea and sternocleidomastoid muscle, medial to and alongside the muscle



▲ **FIGURE 34-3** Auscultation areas of the heart. (From Wilson, A., & Giddens, J. [2009]. *Health assessment for nursing practice* [4th ed., p. 262]. St. Louis: Mosby).

### Box 34-8 Arterial Pulse Points and Grading the Force of Pulses

#### Arteries in the Arms and Hands

Radial pulse: Located at the radial side of the forearm at the wrist

Ulnar pulse: Located on the opposite side of the location of the radial pulse at the wrist

Brachial pulse: Located above the elbow at the antecubital fossa, between the biceps and triceps muscles

#### Arteries in the Legs

Femoral pulse: Located below the inguinal ligament, midway between the symphysis pubis and the anterior superior iliac spine

Popliteal pulse: Located behind the knee

Dorsalis pedis pulse: Located at the top of the foot, in line with the groove between the extensor tendons of the great and first toes

Posterior tibial pulse: Located inside of the ankle, behind and below the medial malleolus (ankle bone)

#### Grading the Force

4+ = strong and bounding

3+ = full pulse, increased

2+ = normal, easily palpable

1+ = weak, barely palpable

- g. Palpate one carotid artery at a time to avoid compromising blood flow to the brain.
- h. Auscultate each carotid artery for the presence of a bruit (a blowing, swishing sound), which indicates blood flow turbulence; normally a bruit is not present.
- i. Palpate the arteries in the extremities (Box 34-8).

#### 8. Client teaching

- a. Advise client to modify lifestyle for risk factors associated with heart and vascular disease.
- b. Encourage the client to seek regular physical examinations.
- c. Client should seek medical assistance for signs of heart or vascular disease.


#### H. Breasts

1. **Subjective data:** Pain or tenderness, lumps or thickening, swollen axillary lymph nodes, nipple discharge, rash or swelling, medications being taken, personal or family history of breast disease, trauma or injury to the breasts, previous surgery on the breasts, breast self-examination compliance, mammograms as prescribed
2. **Objective data: Inspection and palpation**
3. **Inspection**
  - a. Performed with the client's arms raised above the head, the hands pressed against the hips, and the arms extended straight ahead while the client sits and leans forward
  - b. Assess size and symmetry (one breast is often larger than the other); masses, flattening, retraction, or dimpling; color and venous pattern; size, color, shape, and discharge in the nipple and areola; and the direction in which nipples point.
4. **Palpation**
  - a. Client lies supine, with the arm on the side being examined behind the head and a small pillow under the shoulder.
  - b. The nurse uses the pads of the first three fingers to compress the breast tissue gently against the chest wall, noting tissue consistency.
  - c. **Palpation** is performed systematically ensuring that the entire breast and tail are palpated.
  - d. The nurse notes the consistency of the breast tissue, which normally feels dense, firm, and elastic.
  - e. The nurse gently palpates the nipple and areola and compresses the nipple, noting any discharge.
5. Axillary lymph nodes
  - a. The nurse faces the client and stands on the side being examined, supporting the client's arm in a slightly flexed position, and abducts the arm away from the chest wall.
  - b. The nurse places the free hand against the client's chest wall and high in the axillary hollow, then, with the fingertips, gently presses down, rolling soft tissue over the surface of the ribs and muscles.
  - c. Lymph nodes are normally not palpable.
6. Client teaching
  - a. Encourage and teach the client to perform breast self-examination (BSE) (refer to Chapter 52 for information on performing the BSE).

- b. BSE should be performed 7 to 10 days after the menses; postmenopausal clients or clients who have had a hysterectomy should select a specific day of the month and perform BSE monthly on that day.
- c. Regular physical examinations and mammograms should be obtained as prescribed.
- d. Client should report lumps or masses to the healthcare provider immediately.

#### I. Abdomen

1. **Subjective data:** Changes in appetite or weight, difficulty swallowing, dietary intake, intolerance to certain foods, nausea or vomiting, pain, bowel habits, medications currently being taken, history of abdominal problems or abdominal surgery
2. **Objective data**
  - a. Ask the client to empty the bladder.
  - b. Be sure to warm the hands and the end piece of the stethoscope.
  - c. Examine painful areas last.

 When performing an abdominal assessment, the specific order for assessment techniques is inspection, auscultation, percussion, and palpation.

#### 3. Inspection

- a. Contour: Look down at the abdomen and then across the abdomen from the rib margin to the pubic bone; describe as flat, rounded, concave or protuberant.
- b. Symmetry: Note any bulging or masses.
- c. Umbilicus: Should be midline and inverted
- d. Skin surface: Should be smooth and even
- e. Pulsations from the aorta may be noted in the epigastric area, and peristaltic waves may be noted across the abdomen.

#### 4. Auscultation

- a. Performed before **percussion** and **palpation**, which can increase peristalsis.
- b. Hold the stethoscope lightly against the skin and listen for bowel sounds in all four quadrants; begin in the right lower quadrant (bowel sounds are normally heard here).
- c. Note the character and frequency of normal bowel sounds: high-pitched gurgling sounds occurring irregularly from 5 to 30 times a minute.
- d. Identify as normal, hypoactive, or hyperactive (borborygmus).
- e. Absent sounds: Auscultate for 5 minutes before determining that sounds are absent.
- f. Auscultate over the aorta, renal arteries, iliac arteries, and femoral arteries for vascular sounds or bruits.

#### 5. Percussion

- a. All four quadrants are percussed lightly.
- b. Borders of the liver and spleen are percussed.

- c. Tympany should predominate over the abdomen with dullness over the liver and spleen.
- d. **Percussion** over the kidney at the 12th rib (costovertebral angle) should produce no pain.

#### 6. Palpation

- a. Begin with light **palpation** of all four quadrants, using the fingers to depress the skin about 1 cm; next perform deep **palpation**, depressing 5 to 8 cm.
- b. Palpate the liver and spleen (may not be palpable).
- c. Palpate the aortic pulsation in the upper abdomen slightly to the left of midline; normally it pulsates in a forward direction (pulsation expands laterally if an aneurysm is present).

#### 7. Client teaching

- a. Encourage the client to consume a balanced diet.
- b. Substances that can cause gastric irritation should be avoided.
- c. The regular use of laxatives is discouraged.
- d. Lifestyle behaviors that can cause gastric irritation (e.g., smoking, spicy foods) should be modified.
- e. Regular physical examinations are important.
- f. The client should report gastrointestinal problems to the health care provider.

#### J. Musculoskeletal system

1. **Subjective data:** Joint pain or stiffness; redness, swelling, or warm joints; limited motion of joints; muscle pain, cramps, or weakness; bone pain; limitations in activities of daily living; exercise patterns; exposure to occupational hazards (e.g., heavy lifting, prolonged standing or sitting); medications being taken; history of joint, muscle, or bone injuries; history of surgery of the joints, muscles, or bones
2. **Objective data: inspection and palpation**
3. **Inspection:** Inspect gait and posture, and for cervical, thoracic, and lumbar curves (Box 34-9).
4. **Palpation:** Palpate all bones, joints, and surrounding muscles.
5. Range of motion
  - a. Perform active and passive range-of-motion exercises of each major joint.

#### Box 34-9 Common Postural Abnormalities

Lordosis (swayback): increased lumbar curvature

Kyphosis (hunchback): Exaggeration of the posterior curvature of the thoracic spine

Scoliosis: lateral spinal curvature

- b. Check for pain, limited mobility, spastic movement, joint instability, stiffness, and contractures.
  - c. Normally joints are nontender, without swelling, and move freely.
6. Muscle tone and strength
    - a. Assess during measurement of range of motion.
    - b. Ask client to flex the muscle to be examined and then to resist while applying opposing force against the flexion.
    - c. Assess for increased tone (hypertonicity) or little tone (hypotonicity).
  7. Grading muscle strength (Table 34-3)
  8. Client teaching
    - a. The client should consume a balanced diet, including foods high in calcium and vitamin D.
    - b. Activities that cause muscle strain or stress to the joints should be avoided.
    - c. Encourage the client to maintain a normal weight.
    - d. Participation in a regular exercise program is beneficial.
    - e. The client should contact the health care provider if joint or muscle pain or problems occur or if limitations in range of motion or muscle strength develop.
- K. Neurological system** (refer to Chapter 66)
1. **Subjective data:** Headaches, dizziness or vertigo, tremors, weakness, incoordination, numbness or tingling in any area of the body, difficulty speaking or swallowing, medications being taken, history of seizures, history of head injury or surgery, exposure to environmental or occupational hazards (e.g., chemicals, alcohol, drugs)
  2. **Objective data:** Assessment of cranial nerves, level of consciousness, pupils, motor function, cerebellar function, coordination, sensory function, and reflexes
  3. Note mental and emotional status, behavior and appearance, language ability, and intellectual functioning, including memory, knowledge, abstract thinking, association, and judgment.
4. Vital signs: Check temperature, pulse, respirations, and blood pressure; monitor for blood pressure or pulse changes, which may indicate increased intracranial pressure (see Chapter 66 for abnormal respiratory patterns).
  5. Cranial nerves (Table 34-4)
  6. Level of consciousness
    - a. Assess the client's behavior to determine level of consciousness (e.g., alertness, confusion, delirium, unconsciousness, stupor, coma); assessment becomes increasingly invasive as the client is less responsive.
    - b. Speak to client.
    - c. Assess appropriateness of behavior and conversation.
    - d. Lightly touch the client (as culturally appropriate).
  7. Pupils
    - a. Assess size, equality, and reaction to light (brisk, slow, or fixed) and note any unusual eye movements (check direct light and consensual light reflex).
    - b. This component of the neurological examination may be performed during assessment of the eye.
  8. Motor function
    - a. Assess muscle tone, including strength and equality.
    - b. Assess for voluntary and involuntary movements and purposeful and nonpurposeful movements.
    - c. This component of the neurological examination may be performed during assessment of the musculoskeletal system.
  9. Cerebellar function
    - a. Monitor gait as the client walks in a straight line, heel to toe (tandem walking).
    - b. Romberg test: Client is asked to stand with the feet together and the arms at the sides and to close the eyes and hold the position;

**TABLE 34-3** Criteria for Grading and Recording Muscle Strength

Functional Level	Lovett Scale	Grade	Percent of Normal
No evidence of contractility	Zero (0)	0	0
Evidence of slight contractility	Trace (T)	1	10
Complete range of motion with gravity eliminated	Poor (P)	2	25
Complete range of motion with gravity	Fair (F)	3	50
Complete range of motion against gravity with some resistance	Good (G)	4	75
Complete range of motion against gravity with full resistance	Normal (N)	5	100

From Wilson, A., & Giddens, J. (2009). *Health assessment for nursing practice* (4th ed., p. 330). St. Louis: Mosby.



**TABLE 34-4** Assessment of the Cranial Nerves

Cranial Nerve	Test
Cranial nerve I: Olfactory Sensory Controls the sense of smell	Have the client close the eyes and occlude one nostril with a finger. Ask the client to identify nonirritating and familiar odors (e.g., coffee, tea, cloves, soap, chewing gum, peppermint). Repeat the test on the other nostril.
Cranial nerve II: Optic Sensory Controls vision	Assess visual acuity with a Snellen chart and perform an ophthalmoscopic exam. Check peripheral vision by confrontation. Check color vision.
Cranial nerve III: Oculomotor Motor Controls pupillary constriction, upper-eyelid elevation, and most eye movement. Cranial nerve IV: Trochlear Motor Controls downward and inward eye movement. Cranial nerve VI: Abducens Motor Controls lateral eye movement	The motor functions of these nerves overlap; therefore they should be tested together. Inspect the eyelids for ptosis (drooping), then assess ocular movements and note any eye deviation. Test accommodation and direct and consensual light reflexes.
Cranial Nerve V: Trigeminal Sensory and motor Controls sensation in the cornea, nasal and oral mucosa, and facial skin, as well as mastication	To test motor function, ask the client to clench the teeth and assess the muscles of mastication; then try to open the client's jaws after asking the client to keep them tightly closed. Test the corneal reflex by lightly touching the client's cornea with a cotton wisp (this test may be omitted if the client is alert and blinking normally). Check sensory function by asking the client to close the eyes; lightly touch forehead, cheeks, and chin, noting whether the touch is felt equally on the two sides.
Cranial nerve VII: Facial Sensory and motor Controls movement of the face and taste sensation	Test taste perception on the anterior two thirds of the tongue; the client should be able to taste salty and sweet tastes. Have the client smile, frown, and show the teeth. Ask the client to puff out the cheeks. Attempt to close the client's eyes against resistance.
Cranial nerve VIII: Acoustic Sensory Controls hearing and vestibular function	Assessing the client's ability to hear tests the cochlear portion. Assessing the client's sense of equilibrium tests the vestibular portion. Check the client's hearing using acuity tests. Observe the client's balance and watch for swaying when he or she is walking or standing. Assessment of sensorineural hearing loss may be done with the Weber or Rinne test.
Cranial nerve IX: Glossopharyngeal Sensory and motor Controls swallowing ability, sensation in the pharyngeal soft palate and tonsillar mucosa, taste perception on the posterior third of the tongue, and salivation Usually cranial nerves IX and X are tested together	Test taste perception on the posterior one third of the tongue or pharynx; the client should be able to taste bitter and sour tastes. Inspect the soft palate and watch for symmetrical elevation when the client says "aaah." Touch the posterior pharyngeal wall with a tongue depressor to elicit the gag reflex.
Cranial nerve X: Vagus Sensory and motor Controls swallowing and phonation, sensation in the exterior ear's posterior wall, and sensation behind the ear Controls sensation in the thoracic and abdominal viscera Usually cranial nerves IX and X are tested together	Refer to cranial nerve IX.
Cranial nerve XI: Spinal accessory Motor Controls strength of neck and shoulder muscles	The nurse palpates and inspects the sternocleidomastoid muscle as the client pushes the chin against the nurse's hand. The nurse palpates and inspects the trapezius muscle as the client shrugs the shoulders against the nurse's resistance.
Cranial nerve XII: Hypoglossal Motor Controls tongue movements involved in swallowing and speech	Observe the tongue for asymmetry, atrophy, deviation to one side, and fasciculations (uncontrollable twitching). Ask the client to push the tongue against a tongue depressor, then have the client move the tongue rapidly in and out and from side to side.


- normally the client can maintain posture and balance.
- c. If appropriate, ask the client to perform a shallow knee bend or to hop in place on one leg and then the other.
10. Coordination
    - a. Assess by asking the client to perform rapid alternating movements of the hands (e.g., turning the hands over and patting the knees continuously).
    - b. The nurse asks the client to touch the nurse's finger, then his or her own nose; the client keeps the eyes open and the nurse moves the finger to different spots to ensure that the client's movements are smooth and accurate.
    - c. Heel-to-shin test: Assist the client into a supine position, then ask the client to place the heel on the opposite knee and run it down the shin; normally the client moves the heel down the shin in a straight line.
  11. Sensory function
    - a. Pain: Assess by applying an object with a sharp point and one with a dull point to the client's body in random order; ask the client to identify the sharp and dull feelings.
    - b. Light touch: Brush a piece of cotton over the client's skin at various locations in a random order and ask the client to say when the touch is felt.
    - c. Vibration: Use a tuning fork to test the client's ability to feel vibrations over bony prominences; ask the client to announce when the vibration starts and stops.
    - d. Position sense (kinesthesia): Move the client's finger or toe up or down and ask the client which way it has been moved; this tests the client's ability to perceive passive movement.
    - e. Stereognosis: Tests the client's ability to recognize objects placed in his or her hand
    - f. Graphesthesia: Tests the client's ability to identify a number traced on the client's hand
    - g. Two-point discrimination: Tests the client's ability to discriminate two simultaneous pinpricks on the skin
  12. Deep tendon reflexes
    - a. Includes testing the following reflexes: Biceps, triceps, brachioradialis, patella, achilles
    - b. Limb should be relaxed.
    - c. The tendon is tapped quickly with a reflex hammer, which should cause contraction of muscle.
    - d. Scoring deep tendon reflex activity (Box 34-10).
  13. Plantar reflex
    - a. A cutaneous (superficial) reflex is tested with a pointed but not sharp object.

### Box 34-10 Scoring Deep Tendon Reflex Activity

- 0 = No response
- 1+ = Sluggish or diminished
- 2+ = Active or expected response
- 3+ = Slightly hyperactive, more brisk than normal; not necessarily pathologic
- 4+ = Brisk, hyperactive with intermittent clonus associated with disease

Modified from Wilson, A. F., & Giddens, J. F. (2009). *Health assessment for nursing practice* (4th ed., p. 387). St. Louis: Mosby.

- b. The sole of the client's foot is stroked from the heel, up the lateral side, and then across the ball of the foot to the medial side.
- c. The normal response is plantar flexion of all toes.

 **Dorsiflexion of the great toe and fanning of the other toes (Babinski's sign) is abnormal in anyone older than 2 years and indicates the presence of central nervous system disease.**

14. Client teaching
  - a. Client should avoid exposure to environmental hazards (e.g., insecticides, lead).
  - b. High-risk behaviors that can result in head and spinal cord injuries should be avoided.
  - c. Protective devices (e.g., a helmet, body pads) should be worn when participating in high-risk behaviors.
- L. Female genitalia and reproductive tract
  1. **Subjective data:** Urinary difficulties or symptoms such as frequency, urgency, or burning, vaginal discharge, pain, menstrual and obstetrical histories, onset of menopause, medications being taken, sexual activity and the use of contraceptives, history of sexually transmitted infections
  2. **Objective data**
    - a. Use a calm and relaxing approach; the examination is embarrassing for many women and may be a difficult experience for an adolescent.
    - b. Consider the client's cultural background and her beliefs with regard to examination of the genitalia.
    - c. A complete examination will include the external genitalia and a vaginal examination.
    - d. The nurse's role is to prepare the client for the examination and to assist the physician, nurse practitioner, or nurse midwife.
    - e. The client is asked to empty her bladder before the examination.
    - f. The client is placed in the lithotomy position, and a drape is placed across the client

3. External genitalia
  - a. Quantity and distribution of hair
  - b. Characteristics of labia majora and minora (make note of any inflammation, edema, lesions, or lacerations)
  - c. Urethral orifice is observed for color and position.
  - d. Vaginal orifice (introitus) is inspected for inflammation, edema, discoloration, discharge, and lesions.
  - e. The examiner may check Skene's and Bartholin's glands for tenderness or discharge (if discharge is present, color, odor, and consistency are noted and a culture of the discharge is obtained).
  - f. The client is assessed for the presence of a cystocele (a portion of the vaginal wall and bladder prolapse or fall into the orifice anteriorly) or a rectocele (bulging of the posterior wall of the vagina caused by prolapse of the rectum).
4. Speculum examination of the internal genitalia
  - a. Performed by the physician, nurse practitioner, or nurse midwife
  - b. Permits visualization of the cervix and vagina
  - c. Papanicolaou smear: A painless screening test for cervical cancer is done; the specimen is obtained during the speculum examination, and the nurse helps prepare the specimen for laboratory analysis.
5. Client teaching
  - a. Stress the importance of personal hygiene.
  - b. Explain the purpose and recommended frequency of Papanicolaou (Pap) tests.
  - c. Explain the signs of sexually transmitted infections.
  - d. Educate the client on the measures to prevent a sexually transmitted infection.
  - e. Inform the client with a sexually transmitted infection that she must inform her sexual partner of the need for an examination.

#### M. Male genitalia

1. **Subjective data:** Urinary difficulty (e.g., frequency, urgency, hesitancy or straining, dysuria, nocturia), pain, lesions, or discharge on or from the penis, pain or lesions in the scrotum, medications being taken, sexual activity and the use of contraceptives, history of sexually transmitted infections
2. **Objective data**
  - a. Includes assessment (**inspection** and **palpation**) of the external genitalia and inguinal ring and canal
  - b. Client may stand or lie down for this examination.
  - c. Genitalia are manipulated gently to avoid causing erection or discomfort.
  - d. Sexual maturity is assessed by noting the size and shape of the penis and testes, the color

- e. The penis is checked for the presence of lesions or discharge; a culture is obtained if a discharge is present.
- f. The scrotum is inspected for size, shape, and symmetry (normally the left testicle hangs lower than the right) and is palpated for the presence of lumps.
- g. Inguinal ring and canal; **inspection** (asking the client to bear down) and **palpation** are performed to assess for the presence of a hernia.

#### 3. Client teaching

- a. Stress the importance of personal hygiene.
- b. Teach the client how to perform testicular self-examination (TSE); a day of the month is selected and the exam is performed on the same day each month after a shower or bath when the hands are warm and soapy and the scrotum is warm. (Refer to Chapter 52 for information on performing the TSE.)
- c. Explain the signs of sexually transmitted infections.
- d. Educate the client on measures to prevent sexually transmitted infections.
- e. Inform the client with a sexually transmitted infection that he must inform his sexual partner of the need for an examination.

#### N. Rectum and anus

1. **Subjective data:** Usual bowel pattern; any change in bowel habits; rectal pain, bleeding from the rectum, or black or tarry stools; dietary habits; problems with urination; previous screening for colorectal cancer; medications being taken; history of rectal or colon problems; family history of rectal or colon problems
2. **Objective data**
  - a. Examination can detect colorectal cancer in its early stages; in men, the rectal examination can also detect prostate tumors.
  - b. Women may be examined in the lithotomy position after examination of the genitalia.
  - c. A man is best examined by having the client bend forward with his hips flexed and upper body resting over the examination table.
  - d. A nonambulatory client may be examined in the left lateral (Sims') position.
  - e. The external anus is inspected for lumps or lesions, rashes, inflammation or excoriation, scars, or hemorrhoids.
  - f. Digital examination will most likely be performed by the physician or nurse practitioner.
  - g. Digital examination is performed to assess sphincter tone; to check for tenderness, irregularities, polyps, masses, or nodules in the rectal wall; and to assess the prostate gland

- h. The prostate gland is normally firm, without boggy, tenderness, or nodules (hardness or nodules may indicate the presence of a cancerous lesion).
3. Client teaching
- Diet should include high-fiber and low fat foods and plenty of liquids.
  - The client should obtain regular digital examinations.
  - Identify the symptoms of colorectal cancer or prostatic cancer (men).
  - The client should follow the American Cancer Society's guidelines for screening for colorectal cancer.

## VI. DOCUMENTING HEALTH AND PHYSICAL ASSESSMENT FINDINGS

- Documentation of findings may be either written or recorded electronically (depending on agency protocol).
- Whether written or electronic, the documentation is a legal document and a permanent record of the client's health status.
- Principles of documentation need to be followed and data need to be recorded accurately, concisely, completely, legibly, and objectively without bias or opinions; always follow agency protocol for documentation.
- Documentation findings serve as a source of client information for other health care providers.
- Record findings about the client's health history and physical examination as soon as possible after completion of the health assessment.
- Refer to Chapter 7 for additional information about documentation guidelines.



### MORE QUESTIONS ON THE CD!

#### Practice Questions

346. A Spanish-speaking client arrives at the triage desk in the emergency department and states to the nurse, "No speak English, need interpreter." What is the best action for the nurse to take?
- Have one of the client's family members interpret.
  - Have the Spanish speaking triage receptionist interpret.
  - Page an interpreter from the hospital's interpreter services.
  - Obtain a Spanish-English dictionary and attempt to triage the client.
347. A client with a diagnosis of asthma is admitted to the hospital with respiratory distress. What type of adventitious lung sounds would the nurse expect to hear when performing a respiratory assessment on this client?
- Stridor
  - Crackles
  - Wheezes
  - Diminished
348. The nurse is performing a neurological assessment on a client and elicits a positive Romberg's sign. The nurse makes this determination based on which observation?
- An involuntary rhythmic, rapid, twitching of the eyeballs.
  - A dorsiflexion of the ankle and great toe with fanning of the other toes.
  - A significant sway when the client stands erect with feet together, arms at the side, and the eyes closed.
  - A lack of normal sense of position when the client is unable to return extended fingers to a point of reference.
349. The nurse notes documentation that a client is exhibiting Cheyne-Stokes respirations. On assessment of the client, the nurse expects to note which of the following?
- Rhythmic respirations with periods of apnea
  - Regular rapid and deep, sustained respirations
  - Totally irregular respiration in rhythm and depth
  - Irregular respirations with pauses at the end of inspiration and expiration
350. The nurse notes documentation that a client has conductive hearing loss. The nurse understands that this type of hearing loss is caused by which of the following?
- A defect in the cochlea.
  - A defect in the 8th cranial nerve.
  - A physical obstruction to the transmission of sound waves.
  - A defect in the sensory fibers that lead to the cerebral cortex.
351. While performing a cardiac assessment on a client with an incompetent heart valve, the nurse auscultates a murmur. Which of the following best describes the sound of a heart murmur?
- Lub-dub sounds
  - Scratchy, leathery heart noise
  - Gentle, blowing or swooshing noise
  - Abrupt, high-pitched snapping noise
352. The nurse is testing the extraocular movements in a client to assess for muscle weakness in the eyes. The nurse implements which physical