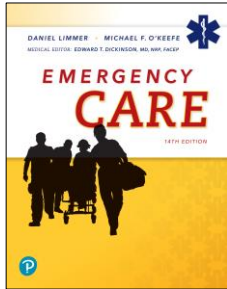


Emergency Care

Fourteenth Edition



Chapter 5

Medical Terminology

Pearson

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Topics

- [Medical Terminology](#)
- [The Language of Anatomy and Physiology](#)
- [Anatomic Terms](#)

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Medical Terminology

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The Components of Medical Terms (1 of 2)

- Compounds are made up of two or more words
 - **Smallpox**

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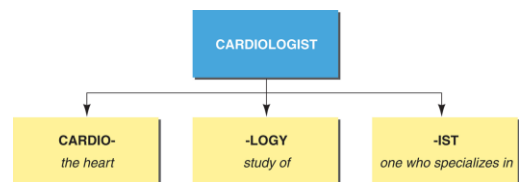
The Components of Medical Terms (2 of 2)

- Words made from parts
 - Roots
 - **Therm** meaning "heat"
 - Roots with combining form
 - **Therm/o + meter = thermometer**
 - Prefixes
 - **Dys**-pnea, **tachy**-pnea
 - Suffixes
 - Arthr-**itis**, hemophil-**iac**

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Word Component Example



Cardiologist: An example of root and suffixes.

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Abbreviations and Acronyms

- Acronym
 - Abbreviation made up of initials that can be pronounced as a word
 - CPAP (**SEE-pap**)
 - Continuous positive airway pressure



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Dissecting a Compound Word—Cholecystitis

- Cholecystitis
 - chol/e meaning bile
 - cyst meaning closed sac
 - -itis meaning inflammation
 - Assembled = “bile-sac-inflammation”
 - Cholecystitis = inflammation of the gallbladder (which stores bile)



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When and When Not to Use Medical Terms

- Do not use when speaking to patients or family members.
- Occasionally complex terms used in messages can cause confusion even among trained health care professionals.
- If there is potential for ambiguity, it is better to use simple terms.



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The Language of Anatomy and Physiology

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Anatomy and Physiology

- Anatomy
 - Study of body structure
- Physiology
 - Study of body function



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Anatomic Terms

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Directional Terms (1 of 10)

- Anatomic position
 - Facing forward
 - Hands at sides
 - Palms facing forward
- Divide body into planes
- Midline
 - Medial is closer to the midline.
 - Lateral is farther from the midline.



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Directional Terms (2 of 10)

- Bilateral
 - "Both sides"
- Unilateral
 - One side
- Midaxillary line



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Directional Terms (3 of 10)

- Anterior (ventral)
 - Front
- Posterior (dorsal)
 - Back
- Superior
 - Vertical, above
- Inferior
 - Vertical, below



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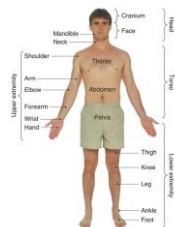
Directional Terms (4 of 10)

- Proximal
 - Closer to torso
- Distal
 - Farther from torso
- Palmar
 - Refers to the palm of the hand
- Plantar
 - Refers to the sole of the foot



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Directional Terms (5 of 10)



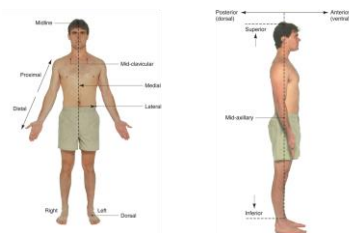
[For long description, see slide 36: Appendix 1](#)

Body regions and anatomic position.



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Directional Terms (6 of 10)



[For long description, see slide 37: Appendix 2](#)

Directional terms.



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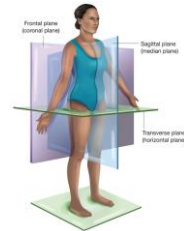
Directional Terms (7 of 10)

- Midclavicular line
 - Divides chest into regions
 - Since there are two clavicles, there are two mid-clavicular lines.



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Directional Terms (8 of 10)



[For long description, see slide 38: Appendix 3](#)

The planes of the body.



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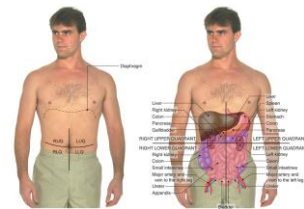
Directional Terms (9 of 10)

- Abdominal quadrants
 - Horizontal and vertical lines through navel
 - Right upper quadrant (RUQ)
 - Left upper quadrant (LUQ)
 - Right lower quadrant (RLQ)
 - Left lower quadrant (LLQ)



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Directional Terms (10 of 10)



[For long description, see slide 39: Appendix 4](#)

Abdominal quadrants.



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Positional Terms (1 of 6)

- Supine
 - Patient lying on back
- Prone
 - Patient lying on abdomen
- Recovery
 - Patient lying on side
 - Preferred for any unconscious nontrauma patient



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Positional Terms (2 of 6)



Anatomic positions: Supine



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Positional Terms (3 of 6)



Anatomic positions: Prone



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Positional Terms (4 of 6)



Anatomic positions: Lateral recumbent (recovery)



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Positional Terms (5 of 6)

- Fowler
 - Patient seated straight up
 - Semi-Fowler
 - Leaning back in a semi-sitting position



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Positional Terms (6 of 6)



Semi-Fowler position.



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Chapter Review



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Chapter Review

- Medicine has a language of its own. As an EMT, you will frequently communicate with medical professionals who speak this language.
- Medical terms generally consist of a root with a prefix and/or suffix.



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Remember

- Medical terminology is the language of health care. Roots, prefixes, and suffixes can lend clues to the meaning of many terms.
- Understanding anatomy and physiology is like reviewing the owner's manual for the body.
- Anatomical terminology brings precision and accuracy to descriptions.



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Questions to Consider

- Are my medical terms accurate and descriptive?
- Can I identify critical organs and structures that reside in an area where a patient has a complaint or traumatic injury?



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Critical Thinking (1 of 2)

- You respond to a teenage boy who has taken a hard fall from his dirt bike. He has a deep gash on the outside of his left arm halfway between shoulder and elbow and another on the inside of his right arm just above the wrist. His left leg is bent at a funny angle about halfway between hip and knee.



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Critical Thinking (2 of 2)

- When you cut away his pants leg, you see a bone sticking out of a wound on the front side. How will you describe your patient's injuries over the radio to the hospital staff?



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Appendix 1

At the top of the body, the head region contains the cranium and face. At the bottom of the face are the mandible and neck. At the middle of the body is the torso region, which contains the thorax or chest, and the abdomen. The upper extremity region includes the parts from the shoulder leading down to the arm, elbow, forearm, wrist, and hand. The lower extremity region includes the thigh, knee, leg, ankle, and foot.

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Appendix 2

There are two illustrations. The illustration on the left is of a male standing face forward with his hands held out to the sides, palms forward. A midline runs down the center of his body. Two points halfway between the midline and each shoulder are labeled mid clavicle. An arrow labeled lateral, points outward from the midline and an arrow labeled medial, points inward. Along the arm, two arrows point from the elbow outward. The arrow pointing toward the head is labeled proximal, and the arrow pointing away from the body is labeled distal. The top of the foot is labeled dorsal. The man's right and left feet are labeled as such. The illustration on the right is of a side view of the male. A line running down the center of the man's side is labeled mid axillary. An arrow pointing forward from this line in the direction of the man's face is labeled anterior or ventral, and an arrow pointing back from this line in the direction of the man's rear is labeled posterior or dorsal. An arrow pointing upward is labeled superior, while an arrow, pointing downward is labeled inferior.

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Appendix 3

The transverse, horizontal, plane cuts horizontally through the body. The sagittal, median, plane cuts vertically through the chest. The frontal, coronal, plane cuts vertically through the body from shoulder to shoulder.

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Appendix 4

There are two illustrations. In the first illustration, the diaphragm of a human is marked across his upper abdomen. The abdomen itself is divided into four quadrants, labeled as follows. Left upper quadrant LUQ, right upper quadrant RUQ, right lower quadrant RLQ, and left lower quadrant LLQ. In the second illustration, the parts of the human body that fall under each of the quadrants are labeled as follows. Left upper quadrant. Liver, spleen, left kidney, stomach, colon, and pancreas. Right upper quadrant. Liver, right kidney, colon, pancreas, and gallbladder. Right lower quadrant. Right kidney, colon, small intestines, major artery and vein to the right leg, ureter, appendix, and a part of the bladder. Left lower quadrant. Left kidney, colon, small intestines, major artery and vein to the left leg, ureter, and the other part of the bladder.

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