

# MEDICAL TERMINOLOGY

## Medical Terminology for EMTs: Roots, Prefixes, Suffixes, and Disease Terms

### 1. Introduction to Medical Terminology

Medical terms are built from **word roots, prefixes, and suffixes**, often derived from **Greek or Latin**. Understanding these components helps EMTs interpret medical conditions, procedures, and anatomy.

**Key Components:**

- 1. **Root Word** – Core meaning (e.g., "*cardio*" = heart).
- 2. **Prefix** – Added at the beginning (e.g., "*tachy-*" = fast).
- 3. **Suffix** – Added at the end (e.g., "*-itis*" = inflammation).

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### 2. Common Prefixes

Prefix	Meaning	Example
a-, an-	Without	<i>Aphasia</i> (inability to speak)
brady-	Slow	<i>Bradycardia</i> (slow heart rate)
dys-	Difficult/painful	<i>Dyspnea</i> (difficulty breathing)

<b>hyper-</b>	Excessive	<i>Hypertension</i> (high BP)
<b>hypo-</b>	Deficient	<i>Hypoglycemia</i> (low blood sugar)
<b>tachy-</b>	Fast	<i>Tachycardia</i> (fast heart rate)
<b>endo-</b>	Inside	<i>Endotracheal</i> (inside the trachea)
<b>peri-</b>	Around	<i>Pericardium</i> (around the heart)

### 3. Common Suffixes

Suffix	Meaning	Example
<b>-algia</b>	Pain	<i>Neuralgia</i> (nerve pain)
<b>-emia</b>	Blood condition	<i>Hypoxemia</i> (low blood oxygen)
<b>-itis</b>	Inflammation	<i>Bronchitis</i> (inflamed bronchi)
<b>-oma</b>	Tumor/mass	<i>Hematoma</i> (blood-filled swelling)
<b>-pathy</b>	Disease	<i>Cardiomyopathy</i> (heart muscle disease)

<b>-pnea</b>	Breathing	<i>Apnea</i> (no breathing)
<b>-rrhea</b>	Discharge/flo w	<i>Diarrhea</i> (excessive bowel movement)

## 4. Common Root Words

Root	Meaning	Example
<b>Cardi/o</b>	Heart	<i>Cardiology</i> (study of the heart)
<b>Pulmon/o</b>	Lungs	<i>Pulmonary</i> (related to lungs)
<b>Hepat/o</b>	Liver	<i>Hepatitis</i> (liver inflammation)
<b>Nephr/o</b>	Kidney	<i>Nephritis</i> (kidney inflammation)
<b>Neur/o</b>	Nerve	<i>Neurology</i> (study of nerves)
<b>Arteri/o</b>	Artery	<i>Arteriosclerosis</i> (hardening of arteries)
<b>Ven/o</b>	Vein	<i>Venous</i> (related to veins)
<b>Gastr/o</b>	Stomach	<i>Gastroenteritis</i> (stomach/intestine inflammation)

## 5. Medical Terms for Common Diseases/Conditions

## A. Cardiovascular

1. **Myocardial Infarction (MI)** – Heart attack ("*myo*"=*muscle*, "*card*"=*heart*, "*infarct*"=*tissue death*).
2. **Hypertension (HTN)** – High BP ("*hyper*"=*excessive*, "*tension*"=*pressure*).
3. **Atherosclerosis** – Artery hardening ("*athero*"=*fatty plaque*, "*sclerosis*"=*hardening*).

## B. Respiratory

1. **Chronic Obstructive Pulmonary Disease (COPD)** – Lung damage ("*pulmon*"=*lungs*, "*ary*"=*related to*).
2. **Pneumonia** – Lung infection ("*pneumon*"=*lungs*, "*-ia*"=*condition*).
3. **Asthma** – Airway inflammation (Greek for "*panting*").

## C. Neurological

1. **Cerebrovascular Accident (CVA)** – Stroke ("*cerebro*"=*brain*, "*vascular*"=*blood vessels*).
2. **Seizure** – Abnormal electrical brain activity (Latin "*sacire*"=*to take possession*).

## D. Trauma/Injury

1. **Hematoma** – Blood clot outside vessels ("*hemat*"=*blood*, "*-oma*"=*mass*).
2. **Fracture** – Broken bone (Latin "*fractura*"=*break*).

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## 6. How Medical Terms Are Determined

1. **By Body System** (e.g., *cardio-* for heart, *neuro-* for nerves).
2. **By Condition** (e.g., *-itis* for inflammation, *-oma* for tumor).
3. **By Procedure** (e.g., *-ectomy* = surgical removal, *-scopy* = visual exam).

### Example Breakdown:

- "**Tachycardia**" = *Tachy-* (*fast*) + *card* (*heart*) + *-ia* (*condition*) → Fast heart rate.
  - "**Endotracheal**" = *Endo-* (*inside*) + *trache* (*trachea*) + *-al* (*pertaining to*) → Inside the trachea.
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# 7. Quick Reference for EMTs

Term	Breakdown	Meaning
Bradycardia	Brady- (slow) + card (heart) + -ia	Slow heart rate
Hyperglycemia	Hyper- (high) + glyc (sugar) + -emia (blood)	High blood sugar
Hypoxemia	Hypo- (low) + ox (oxygen) + -emia	Low blood oxygen
Hemothorax	Hemo- (blood) + thorax (chest)	Blood in chest cavity

# Exhaustive EMT Medical Terminology List

## 1. Anatomy & Physiology Terms

### A. Body Systems

Term	Meaning
Cardiovascular	Heart & blood vessels
Pulmonary	Lungs & respiratory system
Neurological	Brain, spinal cord, nerves

<b>Gastrointestinal (GI)</b>	Stomach, intestines, digestion
<b>Musculoskeletal</b>	Bones, muscles, joints
<b>Integumentary</b>	Skin, hair, nails
<b>Renal</b>	Kidneys & urinary system
<b>Endocrine</b>	Hormones & glands (e.g., thyroid)

## B. Directional Terms

Term	Meaning	Example
<b>Anterior</b>	Front	<i>"The sternum is anterior to the spine."</i>
<b>Posterior</b>	Back	<i>"The occiput is posterior to the forehead."</i>
<b>Superior</b>	Above	<i>"The head is superior to the chest."</i>
<b>Inferior</b>	Below	<i>"The feet are inferior to the knees."</i>
<b>Lateral</b>	Side	<i>"The ears are lateral to the nose."</i>
<b>Medial</b>	Midline	<i>"The nose is medial to the eyes."</i>
<b>Proximal</b>	Closer to trunk	<i>"The elbow is proximal to the wrist."</i>

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<b>Distal</b>	Farther from trunk	<i>"The fingers are distal to the wrist."</i>
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## 2. Common Medical Prefixes

Prefix	Meaning	Example
<b>a-/an-</b>	Without	<i>Aphasia (inability to speak)</i>
<b>anti-</b>	Against	<i>Antibiotic (kills bacteria)</i>
<b>brady-</b>	Slow	<i>Bradycardia (slow HR)</i>
<b>dys-</b>	Painful/difficult	<i>Dyspnea (labored breathing)</i>
<b>hyper-</b>	Excessive	<i>Hypertension (high BP)</i>
<b>hypo-</b>	Deficient	<i>Hypoglycemia (low blood sugar)</i>
<b>tachy-</b>	Fast	<i>Tachycardia (fast HR)</i>
<b>endo-</b>	Inside	<i>Endotracheal (inside trachea)</i>
<b>peri-</b>	Around	<i>Pericardium (around heart)</i>

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### 3. Common Medical Suffixes

Suffix	Meaning	Example
-algia	Pain	Neuralgia (nerve pain)
-emia	Blood condition	Anemia (low RBCs)
-itis	Inflammation	Bronchitis (inflamed bronchi)
-oma	Tumor/mass	Hematoma (blood clot)
-pathy	Disease	Neuropathy (nerve damage)
-pnea	Breathing	Apnea (no breathing)
-rrhea	Flow/discharge	Diarrhea (loose stools)
-ectomy	Surgical removal	Appendectomy (removal of appendix)

### 4. Root Words by Body System

#### A. Cardiovascular

Root	Meaning	Example
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<b>Cardi/o</b>	Heart	<i>Cardiology (heart study)</i>
<b>Angi/o</b>	Vessel	<i>Angioplasty (vessel repair)</i>
<b>Hem/o</b>	Blood	<i>Hemorrhage (blood loss)</i>

## B. Respiratory

Root	Meaning	Example
<b>Pulmon/o</b>	Lungs	<i>Pulmonary (lung-related)</i>
<b>Bronch/o</b>	Airways	<i>Bronchitis (airway inflammation)</i>
<b>Pharyng/o</b>	Throat	<i>Pharyngitis (sore throat)</i>

## C. Neurological

Root	Meaning	Example
<b>Neur/o</b>	Nerve	<i>Neurology (nerve study)</i>
<b>Encephal/o</b>	Brain	<i>Encephalitis (brain inflammation)</i>
<b>Mening/o</b>	Meninges	<i>Meningitis (meningeal infection)</i>

D. Musculoskeletal

Root	Meaning	Example
Oste/o	Bone	Osteoporosis (porous bones)
My/o	Muscle	Myalgia (muscle pain)
Arthr/o	Joint	Arthritis (joint inflammation)

5. Common Medical Conditions

A. Cardiovascular

Term	Meaning
Myocardial Infarction (MI)	Heart attack
Congestive Heart Failure (CHF)	Heart can't pump effectively
Atherosclerosis	Artery hardening (plaque buildup)

B. Respiratory

Term	Meaning
<b>Chronic Obstructive Pulmonary Disease (COPD)</b>	Chronic lung damage
<b>Pneumothorax</b>	Collapsed lung (air in chest cavity)
<b>Pulmonary Embolism (PE)</b>	Blood clot in lungs

### C. Trauma/Injury

Term	Meaning
<b>Contusion</b>	Bruise (bleeding under skin)
<b>Laceration</b>	Deep cut (jagged edges)
<b>Avulsion</b>	Tissue torn away

## 6. Emergency Procedures & Equipment

Term	Meaning
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<b>CPR</b>	Cardiopulmonary resuscitation
<b>Defibrillation</b>	Electric shock for VF/VT
<b>Intubation</b>	Inserting a breathing tube
<b>Tourniquet</b>	Stops severe bleeding

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## 7. Medications & Abbreviations

<b>Term</b>	<b>Meaning</b>
<b>ASA (Aspirin)</b>	Blood thinner for heart attacks
<b>NTG (Nitroglycerin)</b>	Vasodilator for chest pain
<b>Epi (Epinephrine)</b>	For anaphylaxis/cardiac arrest

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## 8. EMT Assessment Mnemonics

<b>Mnemonic</b>	<b>Purpose</b>
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<b>OPQRST</b>	Pain assessment (Onset, Provocation, Quality, etc.)
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<b>SAMPLE</b>	Patient history (Symptoms, Allergies, Medications, etc.)
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<b>DCAP-BTLS</b>	Trauma assessment (Deformities, Contusions, etc.)
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## Final Notes:

- **Use flashcards** to memorize terms.
- **Practice breaking down words** (e.g., "*tachycardia*" = *fast + heart + condition*).
- **Always confirm abbreviations** to avoid errors.

This list is **exhaustive yet organized** for quick reference. Let me know if you'd like additions! 🚒

List as many as possible

Here is an exhaustive, categorized list of medical terminology relevant to EMS professionals:

## A. Anatomical Terms

1. **Anterior** - Front of the body
2. **Posterior** - Back of the body
3. **Superior** - Toward the head
4. **Inferior** - Away from the head
5. **Medial** - Toward midline
6. **Lateral** - Away from midline

7. **Proximal** - Closer to point of attachment
8. **Distal** - Farther from point of attachment
9. **Superficial** - Near the surface
10. **Deep** - Further from the surface

## **B. Body Systems & Organs**

11. **Cardiac** - Heart
12. **Pulmonary** - Lungs
13. **Hepatic** - Liver
14. **Renal** - Kidneys
15. **Neurological** - Brain/nerves
16. **Gastrointestinal** - Digestive system
17. **Integumentary** - Skin
18. **Musculoskeletal** - Muscles/bones
19. **Endocrine** - Hormone system
20. **Lymphatic** - Immune system

## **C. Common Prefixes**

21. **Hyper-** - Excessive (Hypertension)
22. **Hypo-** - Deficient (Hypoglycemia)
23. **Tachy-** - Fast (Tachycardia)
24. **Brady-** - Slow (Bradycardia)
25. **Dys-** - Difficult (Dyspnea)
26. **A-/An-** - Without (Anemia)
27. **Endo-** - Inside (Endotracheal)
28. **Epi-** - Upon (Epinephrine)
29. **Sub-** - Under (Subcutaneous)
30. **Peri-** - Around (Pericardium)

## **D. Common Suffixes**

31. **-algia** - Pain (Neuralgia)
32. **-itis** - Inflammation (Bronchitis)
33. **-emia** - Blood condition (Hypoxemia)
34. **-oma** - Tumor (Hematoma)
35. **-pathy** - Disease (Neuropathy)
36. **-pnea** - Breathing (Apnea)

- 37. **-rrhea** - Flow (Diarrhea)
- 38. **-ectomy** - Removal (Appendectomy)
- 39. **-scopy** - Visual exam (Endoscopy)
- 40. **-plasty** - Surgical repair (Angioplasty)

## E. Vital Signs & Measurements

- 41. **BP** - Blood pressure
- 42. **HR** - Heart rate
- 43. **RR** - Respiratory rate
- 44. **SpO2** - Oxygen saturation
- 45. **ETCO2** - End-tidal CO2
- 46. **GCS** - Glasgow Coma Scale
- 47. **BGL** - Blood glucose level
- 48. **Temp** - Temperature
- 49. **MAP** - Mean arterial pressure
- 50. **CVP** - Central venous pressure

## F. Common Medical Conditions

- 51. **MI** - Myocardial infarction
- 52. **CVA** - Cerebrovascular accident
- 53. **COPD** - Chronic obstructive pulmonary disease
- 54. **CHF** - Congestive heart failure
- 55. **DKA** - Diabetic ketoacidosis
- 56. **PE** - Pulmonary embolism
- 57. **ARDS** - Acute respiratory distress syndrome
- 58. **STEMI** - ST-elevation myocardial infarction
- 59. **NSTEMI** - Non-ST elevation MI
- 60. **TIA** - Transient ischemic attack

## G. Trauma Terms

- 61. **Laceration** - Jagged wound
- 62. **Avulsion** - Torn away tissue
- 63. **Abrasion** - Scrape
- 64. **Contusion** - Bruise
- 65. **Puncture** - Penetrating wound
- 66. **Fracture** - Broken bone

- 67. **Dislocation** - Bone out of joint
- 68. **Sprain** - Ligament injury
- 69. **Strain** - Muscle/tendon injury
- 70. **Compartment syndrome** - Increased tissue pressure

## **H. Emergency Procedures**

- 71. **CPR** - Cardiopulmonary resuscitation
- 72. **ACLS** - Advanced cardiac life support
- 73. **PALS** - Pediatric advanced life support
- 74. **ETI** - Endotracheal intubation
- 75. **IO** - Intraosseous access
- 76. **IV** - Intravenous
- 77. **BVM** - Bag-valve-mask ventilation
- 78. **NPA/OPA** - Nasal/oral pharyngeal airway
- 79. **Cricothyrotomy** - Surgical airway
- 80. **Thoracostomy** - Chest tube insertion

## **I. Medications (Generic Names)**

- 81. **Epinephrine** - Anaphylaxis/arrest
- 82. **Nitroglycerin** - Chest pain
- 83. **Aspirin** - MI
- 84. **Albuterol** - Bronchospasm
- 85. **Naloxone** - Opioid overdose
- 86. **Diazepam** - Seizures
- 87. **Morphine** - Pain
- 88. **Furosemide** - Pulmonary edema
- 89. **Dextrose** - Hypoglycemia
- 90. **Atropine** - Bradycardia

## **J. Assessment Tools**

- 91. **OPQRST** - Pain assessment
- 92. **SAMPLE** - Patient history
- 93. **DCAP-BTLS** - Trauma assessment
- 94. **AVPU** - Mental status
- 95. **FAST** - Stroke assessment
- 96. **PERRL** - Pupil assessment



97. **Cincinnati Stroke Scale**

98. **RACE Scale** - Stroke severity

99. **APGAR** - Newborn assessment

100. **CIAMPEDS** - Pediatric assessment