

Chapter 4: Respiratory System

Building a Medical Terminology Foundation 2e – Student Companion by Kimberlee Carter; Marie Rutherford; and Connie Stevens

This book is intended as a companion to *Building a Medical Terminology Foundation 2e* (<https://ecampusontario.pressbooks.pub/medicalterminology2/>).

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Respiratory System

If you would like to review the textbook chapter content, please visit **Chapter 4: Respiratory System [New Tab]**.

Learning Objectives

- Identify the anatomy and describe the main functions of the respiratory system
- Analyze, translate, and define medical terms and common abbreviations of the respiratory system
- Practice the spelling and pronunciation of respiratory system terminology
- Identify the medical specialties associated with the respiratory system and explore common diseases, disorders, diagnostic testing and procedures related to the respiratory system

Key Word Components

Identify meanings of key word components of the respiratory system:

Prefixes

- a- (absence of, without)
- an- (absence of, without)
- brady- (slow)
- dys- (difficult, painful, abnormal, labored)
- endo- (within, in)
- eu- (normal, good)
- hyper- (above, excessive)
- hypo- (below, incomplete)

- intra- (within, in)
- poly- (many, much)
- tachy- (fast, rapid)

Combining Forms

- adenoid/o (adenoids)
- alveol/o (alveolus)
- atel/o (imperfect, incomplete)
- bronch/o (bronchus)
- bronchi/o (bronchus)
- capn/o (carbon dioxide)
- diaphragmat/o (diaphragm)
- epiglott/o (epiglottis)
- hem/o (blood)
- hemat/o (blood)
- laryng/o (larynx)
- lob/o (lobe)
- muc/o (mucus)
- nas/o (nose)
- orth/o (straight)
- ox/i (oxygen)
- pharyng/o (pharynx)
- phon/o (sound, voice)
- phren/o (diaphragm)
- pleur/o (pleura)
- pneum/o (lung, air)
- pneumon/o (lung, air)
- pneumat/o (lung)
- pulmon/o (lung)
- py/o (pus)
- radi/o (x-rays, ionizing radiation)
- respir/o (breath, breathing)
- rhin/o (nose)
- sept/o (septum)
- sinus/o (sinus)
- somn/o (sleep)
- son/o (sound)
- spir/o (breathe, breathing)
- thorac/o (thorax, chest cavity)
- tom/o (to cut, section, slice)
- tonsill/o (tonsil)
- trache/o (trachea)

Suffixes

- -algia (pain)
- -ar (pertaining to)
- -ary (pertaining to)
- -cele (hernia, protrusion)
- -centesis (surgical puncture to aspirate fluid)
- -eal (pertaining to)
- -ectasis (stretching out, dilation, expansion)
- -ectomy (excision, cut out)
- -emia (in the blood)
- -genic (producing, originating, causing)
- -gram (the record, radiographic image)
- -graph (instrument used to record)
- -graphy (process of recording, radiographic imaging)
- -ia (condition, diseased state, abnormal state)
- -ic (pertaining to)
- -itis (inflammation)
- -logist (specialist or physician who studies and treats)
- -logy (study of)
- -meter (instrument used to measure)
- -metry (measurement)
- -oid (resembling)
- -pexy (surgical fixation, suspension)
- -plasty (surgical repair)
- -pnea (breathing)
- -ptysis (spitting, coughing)
- -rrhagia (rapid flow of blood, excessive bleeding)
- -scope (instrument used for visual examination)
- -scopic (pertaining to visual examination)
- -scopy (process of visually examining, visual examination)
- -spasm (sudden involuntary muscle contraction, spasmodic contraction)
- -stenosis (constriction, narrowing)
- -stomy (creation of an artificial opening)
- -thorax (chest, chest cavity)
- -tome (instrument used to cut)
- -tomy (cut into, incision)

Respiratory System Words

Respiratory System Medical Terms (Text version)

1. **Adenoiditis**

- adenoid/itis
- inflammation of the adenoids

2. **adenoidectomy**

- adenoid/ectomy
- excision of the adenoids

3. **adenotome**

- aden/o/tome
- instrument used to cut the adenoids

4. **alveolitis**

- alveol/itis
- inflammation of the alveoli

5. **alveolar**

- alveol/ar
- pertaining to the alveolus

6. **atelectasis**

- atel/ectasis
- incomplete expansion

7. **bronchitis**

- bronch/itis
- inflammation of the bronchus

8. **bronchogenic carcinoma**

- bronch/o/genic carcin/oma
- cancerous tumour originating in a bronchus (lung cancer)

9. **bronchopneumonia**

- bronch/o/pneumon/ia

- diseased state of bronchi and lungs

10. **bronchoplasty**

- bronch/o/plasty
- surgical repair of the bronchi

11. **bronchoscope**

- bronch/o/scope
- instrument used for visual examination of the bronchi

12. **bronchoscopy**

- bronch/o/scopy
- visual examination of the bronchi

13. **bronchoalveolar**

- bronch/o/alveol/ar
- pertaining to the bronchi and alveoli

14. **bronchospasm**

- bronch/o/spasm
- spasmodic contraction of the bronchi

15. **bronchiectasis**

- bronchi/ectasis
- dilation of the bronchi

16. **capnometer**

- capn/o/meter
- instrument used to measure carbon dioxide

17. **acapnia**

- a/capn/ia
- condition of absence (less than normal level) of carbon dioxide (in the blood)

18. **hypercapnia**

- hyper/capn/ia
- condition of excessive (greater than normal levels) carbon dioxide (in the blood)

19. **hypocapnia**

- hypo/capn/ia
- condition of deficient (low levels) of carbon dioxide (in the blood)

20. **diaphragmatocele**

- diaphragmat/o/cele
 - hernia of the diaphragm
21. **diaphragmatic**
- diaphragmat/ic
 - pertaining to the diaphragm
22. **epiglottitis**
- epiglott/itis
 - inflammation of the epiglottis
23. **hemothorax**
- hem/o/thorax
 - blood in the thoracic cavity
24. **hematology**
- hemat/o/logy
 - study of blood
25. **hematologist**
- hemat/o/logist
 - specialist in blood and blood disorders
26. **laryngotracheobronchitis (LTB)**
- laryng/o/trache/o/bronch/itis
 - inflammation of the larynx, trachea, and bronchi
27. **laryngoplasty**
- laryng/o/plasty
 - surgical repair of the larynx
28. **laryngostomy**
- laryng/o/stomy
 - creation of an artificial opening into the larynx
29. **laryngotracheotomy**
- laryng/o/trache/o/tomy
 - incision into the larynx and trachea
30. **laryngoscope**
- laryng/o/scope
 - instrument used for visual examination of the larynx
31. **laryngoscopy**

- laryng/o/scopy
- process of viewing the larynx

32. **laryngeal**

- laryng/eal
- pertaining to the larynx

33. **laryngospasm**

- laryng/o/spasm
- spasmodic contraction of the larynx

34. **laryngitis**

- laryng/itis
- inflammation of the larynx

35. **lobar pneumonia**

- lob/ar pneumon/ia
- disease state of the lung pertaining to the lobe(s)

36. **lobectomy**

- lob/ectomy
- excision of the lobe(s)

37. **muroid**

- muc/oid
- resembling mucus

38. **mucous**

- muc/ous
- pertaining to mucus

39. **nasopharyngitis**

- nas/o/pharyng/itis
- inflammation of the nose and pharynx

40. **nasopharyngeal**

- nas/o/pharyng/eal
- pertaining to the nose and pharynx

41. **orthopnea**

- orth/o/pnea
- breathing is easier in a straight position

42. **anoxia**

- an/ox/ia
- condition of absence (deficiency) of oxygen

43. **oximeter**

- oxi/meter
- instrument used to measure oxygen

44. **hypoxemia**

- hyp/ox/emia
- condition of deficient oxygen in the blood

45. **hypoxia**

- hyp/ox/ia
- condition of deficient oxygen

46. **pharyngitis**

- pharyng/itis
- inflammation of the pharynx

47. **aphonia**

- a/phon/ia
- condition of absence of voice

48. **dysphonia**

- dys/phon/ia
- condition of difficult speaking (voice)

49. **phrenalgia**

- phren/algia
- pain in the diaphragm

50. **phrenospasm**

- phren/o/spasm
- spasm of the diaphragm

51. **pleuritic**

- pleurit/ic
- pertaining to the pleura

52. **pleuritis**

- pleur/itis
- inflammation of the pleura

53. **pleuropexy**

- pleur/o/pexy
- surgical fixation of the pleura

54. **interpleural**

- inter/pleur/al
- pertaining to between the pleura (space between the pleural membranes)

55. **pneumoconiosis**

- pneum/o/coni/osis
- abnormal condition of dust in the lungs

56. **pneumonia**

- pneumon/ia
- diseased state of lung

57. **pneumonitis**

- pneumon/itis
- inflammation of the lung

58. **pneumothorax**

- pneum/o/thorax
- air in the thoracic cavity

59. **pneumonectomy**

- pneumon/ectomy
- excision of the lung

60. **pneumatocele**

- pneumat/o/cele
- hernia of the lung

61. **pulmonary**

- pulmon/ary
- pertaining to the lung(s)

62. **pyothorax**

- py/o/thorax
- pus in the thoracic cavity

63. **radiography**

- radi/o/graphy
- process of recording x-rays

64. **radiologist**

- radi/o/logist
- physician who specializes in the diagnosis and treatment of disease using medical imaging

65. **radiology**

- radi/o/logy
- study of the use of radiant energy in diagnosing disease

66. **respirologist**

- respir/o/logist
- specialist who studies and treats disease and disorders related to breathing

67. **respirology**

- respir/o/logy
- the study of breathing disorders and disease

68. **rhinitis**

- rhin/itis
- inflammation of the nose

69. **rhinomycosis**

- rhin/o/myc/osis
- abnormal condition of fungus in the nose

70. **rhinorrhagia**

- rhin/o/rrhagia
- rapid flow of blood from the nose

71. **rhinoplasty**

- rhin/o/plasty
- surgical repair of the nose

72. **rhinorrhea**

- rhin/o/rrhea
- discharge from the nose

73. **septoplasty**

- sept/o/plasty
- surgical repair of the septum

74. **septotomy**

- sept/o/tomy
- incision into the (nasal) septum

75. **sinusitis**

- sinus/itis
- inflammation of a sinus

76. **polysomnography (PSG)**

- poly/somn/o/graphy
- process of recording many (test) during sleep

77. **sonogram**

- son/o/gram
- the record of sound

78. **sonography**

- son/o/graphy
- process of recording sound

79. **spirometer**

- spir/o/meter
- instrument used to measure breathing (lung volume)

80. **spirometry**

- spir/o/metry
- measuring breathing (air flow)

81. **thoracalgia**

- thorac/algia
- pain in the chest, thorax

82. **thoracocentesis**

- thorac/o/centesis
- surgical puncture to aspirate fluid (from the thoracic cavity)

83. **thoracentesis**

- thora/centesis
- surgical puncture to aspirate fluid from thoracic cavity

84. **thoracotomy**

- thorac/o/tomy
- incision into the thoracic cavity

85. **thoracoscopy**

- thorac/o/scopy
- visual examination of the thoracic cavity

86. **thoracic**

- thorac/ic
- pertaining to the chest, thorax

87. thoracoscope

- thorac/o/scope
- instrument used to visualize the thoracic cavity

88. tomography

- tom/o/graphy
- process of recording slices

89. tonsillitis

- tonsill/itis
- inflammation of the tonsils

90. tonsillectomy

- tonsill/ectomy
- excision of the tonsils

91. tracheitis

- trache/itis
- inflammation of the trachea

92. tracheoplasty

- trache/o/plasty
- surgical repair of the trachea

93. tracheostomy

- trache/o/stomy
- creation of an artificial opening into the trachea

94. tracheotomy

- trache/o/tomy
- incision into the trachea

95. endotracheal

- endo/trach/eal
- pertaining to within the trachea

96. tracheostenosis

- trache/o/stenosis
- narrowing of the trachea

97. endoscope

- endo/scope
- instrument used to view within (a hollow organ or cavity)

98. **endoscopic**

- endo/scopic
- pertaining to view within (a hollow organ or cavity)

99. **endoscopy**

- endo/scopy
- visual examination within (a hollow organ or cavity)

100. **apnea**

- a/pnea
- absence of breathing

101. **dyspnea**

- dys/pnea
- breathing that is difficult

102. **eupnea**

- eu/pnea
- normal breathing

103. **hypopnea**

- hypo/pnea
- deficient breathing

104. **tachypnea**

- tachy/pnea
- rapid breathing

Activity Source: Respiratory System Medical Terms by Kimberlee Carter, licensed under CC BY 4.0./Text version added.

Pronouncing and Defining Respiratory System Medical Terms

Respiratory System Word Not Easily Broken Down (Text version)

1. **Epistaxis**
 - nosebleed (rhinorrhagia)
2. **influenza (flu)**
 - highly contagious viral infection effecting the respiratory tract
3. **pleural effusion**
 - fluid in the pleural space
(caused by disease or trauma)
4. **pulmonary edema**
 - fluid accumulation in alveoli and bronchioles
(related to heart failure)
5. **pulmonary embolism (PE)**
 - blockage of pulmonary circulation to the lungs
6. **upper respiratory infection**
 - infection of the nasal cavity, sinuses, pharynx and larynx
7. **stethoscope**
 - instrument used to hear internal body sounds
8. **asphyxia**
 - deprivation of oxygen to tissues, suffocation
9. **aspirate**
 - suction of fluid, inhalation of fluid
10. **mucus**
 - slimy liquid secreted by mucous membranes
11. **nebulizer**
 - device that creates a mist for giving respiratory treatment or medication
12. **nosocomial infection**

- infection acquired in hospital

13. **sputum**

- mucous secretion from lungs, bronchi, and trachea that is expelled through the mouth

14. **ventilator**

- mechanical device that assist with breathing

Activity Source: Respiratory System Word Not Easily Broken Down by Kimberlee Carter, licensed under CC BY 4.0./ Text version added.

Pronouncing and Defining Commonly Abbreviated Respiratory System Terms

Practice pronouncing and defining these commonly abbreviated respiratory system terms:

- ABGs (arterial blood gases)
- AFB (acid-fast bacilli)
- ARDS (acute respiratory distress syndrome)
- BiPAP (bilevel positive airway pressure)
- C&S (culture and sensitivity)
- CAP (community-acquired pneumonia)
- CF (cystic fibrosis)
- CO₂ (carbon dioxide)
- COPD (chronic obstructive pulmonary disease)
- CPAP (continuous positive airway pressure)
- CPT (chest physiotherapy)
- CT (computed tomography, computerized tomography)
- CXR (chest x-ray)
- DPI (dry powder inhaler)
- flu (influenza)
- IPPB (intermittent positive-pressure breathing)
- IPF (idiopathic pulmonary fibrosis)
- LLL (left lower lobe)
- LTB (laryngotracheobronchitis)
- LUL (left lower lobe)
- MDI (metered-dose inhaler)
- NIPPV (non-invasive positive-pressure ventilator)
- O₂ (oxygen)

- OSA (obstructive sleep apnea)
- PEP (positive expiratory pressure)
- PFM (peak flow meter)
- PFTs (pulmonary function tests)
- RLL (right lower lobe)
- RML (right middle lobe)
- RUL (right upper lobe)
- SOB (shortness of breath)
- SVN (small-volume nebulizer)
- TB (tuberculosis)
- URI (upper respiratory infection)
- VAP (ventilator-associated pneumonia)

Sorting Terms

Sort the terms from the word lists above into the following categories:

- **Disease and Disorder** (terms describing any deviation from normal structure and function)
- **Diagnostic** (terms related to process of identifying a disease, condition, or injury from its signs and symptoms)
- **Therapeutic** (terms related to treatment or curing of diseases)
- **Anatomic** (terms related to body structure)

Respiratory System Structures

Label the following respiratory system structures:

Labeling the Respiratory System (Text Version)

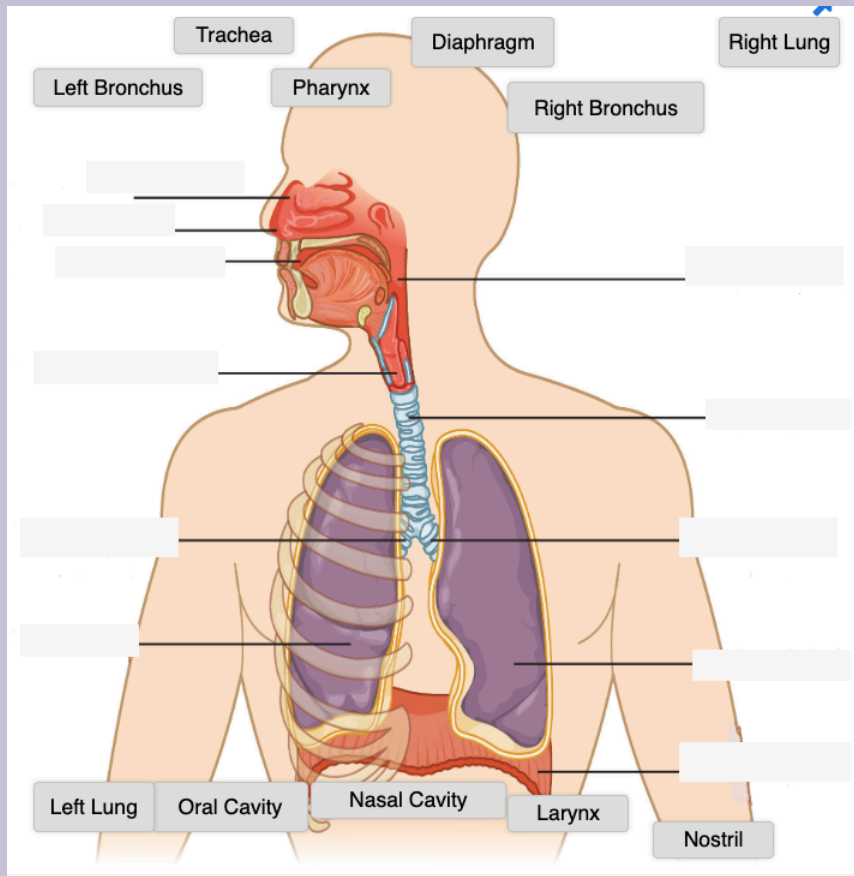
Label the diagram with correct words listed below:

1. Left Bronchus
2. Trachea
3. Pharynx

4. Diaphragm
5. Right Bronchus
6. Right Lung

7. Left Lung
8. Oral Cavity
9. Nasal Cavity

10. Larynx
11. Nostril



Labeling the Respiratory System Diagram (Text version)

This is an anatomical diagram of the major organs and structure of the human respiratory system. Identified starting from the top of the diagram is the organs and structures which serve as a passageway for air and include, _____[Blank 1] which warms and moistens the air, the _____[Blank 2] where air enters the respiratory system and travels to the _____[Blank 3] also known as the mouth, from the mouth the air moves to the _____[Blank 4], then to through the voice box correctly called the _____[Blank 5], and passes into the _____[Blank 6] often referred to as the windpipe. The trachea bifurcates meaning it separates into two anatomical branches each leading to each lung, on the right side is the _____[Blank 7], on the left side, the _____[Blank 8]. Air arrives at the lungs to allow for the exchange of gases arrives and enters on the right side into the _____[Blank 9] and on the left side the _____[Blank 10]. The muscular partition supporting the lungs known as the _____[Blank 11]. This detailed illustration supports understanding of the respiratory system's structure and function.

Check your answers: ¹

Activity source: Respiratory System Anatomy by Kimberlee Carter, illustration from *Anatomy and Physiology* (OpenStax), licensed under CC BY 4.0./ Text version added.

Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System History and Physical (Text Version)

Fill in the consultation report with correct words listed below:

- Exert
- Edema
- diuretic
- membranes
- HEENT
- apnea
- heart failure
- lobes
- inspiration
- allergens
- breath
- erythema
- monitor
- asthma
- edema

RESPIRATORY SYSTEM – HISTORY & PHYSICAL EXAMINATION

PATIENT NAME: Randy BURNS

AGE: 56

DOB: July 2

SEX: Male

ATTENDING PHYSICIAN: Joyce Mathers, MD, Pulmonology

HISTORY: This 56-year-old male is presenting with a 2-week history of worsening dyspnea not associated with exertion. The patient states that he does not have to _____[Blank 1] himself for his breathing to get difficult. He feels that “he cannot get his breath” sometimes even with lying in bed. He does report developing a cold and runny nose over the last 10 days, but the worsened breathing seemed to have started a few days earlier than this. He reports that the shortness of _____[Blank 2] has progressively gotten worse in the past 2-3 days. Patient does not report any leg or foot _____[Blank 3].

PAST HISTORY: The patient has a life history of asthma triggered by environmental _____[Blank 4] – grass cutting, trees budding in the spring, street dust etc. He has used a puffer when he has symptoms since he was a child. He has a history of congestive _____[Blank 5] (CHF) and sleep _____[Blank 6] for which he uses a CPAP machine nightly.

PHYSICAL EXAMINATION: GENERAL APPEARANCE: The patient appears laboring in breathing. He is quite distressed. VITAL SIGNS: Temperature 97.1, pulse 88, blood pressure 121/86, weight 209 pounds, height 5 feet 8 inches. _____[Blank 7] : Eye exam PERRLA. Normocephalic, atraumatic. Moist mucous _____[Blank 8]. No oropharyngeal _____[Blank 9]. No signs of infection. Tongue is coated but tonsils are clear. NECK: Supple. No lymphadenopathy. No bruits. LUNGS: There is marked wheezing on _____[Blank 10] bilaterally. Some minimal evidence of consolidation in the lower _____[Blank 11] bilaterally. No rales or rubs. CARDIAC: Irregular rate and rhythm, variable S1 and S2. EXTREMITIES: Some pedal and ankle _____[Blank 12] noted in low extremities. No cyanosis or clubbing.

ASSESSMENT AND PLAN

1. Acute shortness of breath with a history of allergic _____[Blank 13]. Rule out upper respiratory infection (URI). Will order chest x-ray stat.

2. Atrial fibrillation. Patient has a controlled rate. Will administer one dose of Lovenox overnight.
3. Mild symptoms of CHF due to lower extremity edema. Will administer Aldactone to bring this under control. Will _____[Blank 14] the patient's diuretic volume.
4. Plan to admit patient overnight for observation to await stat CXR result and to monitor the effects of _____[Blank 15] and anticoagulant therapies.

Joyce Mathers, MD, Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ²

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Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System Consultation Report (Text Version)

Fill in the consultation report with correct words listed below:

- Oxygen
- pleura
- basal
- hemoptysis
- dyspnea
- thoracostomy
- q. d.
- COPD
- antibiotics
- wheezing
- atelectasis

RESPIRATORY SYSTEM – CONSULTATION REPORT

PATIENT NAME: Wayne SAUNDERS

AGE: 59

DOB: September 7

SEX: Male

DATE OF CONSULTATION: March 29

CONSULTANT: Joyce Mathers, MD, Pulmonology

REASON FOR CONSULTATION: Sudden onset dyspnea and respiratory distress.

HISTORY: This garrulous 59-year-old was seen in the ER today with a complaint of sudden onset _____[Blank 1] and some respiratory distress. Denies any nausea, vomiting, chest pain, _____[Blank 2], cough, fever or chills.

PAST HISTORY: Is positive for asthma and _____[Blank 3] as patient is a lifelong smoker at 1+ packs per day.

ASSESSMENT: CHEST has good air entry bilaterally. No _____[Blank 4]. Bilateral _____[Blank 5] crackles are noted. Some dullness to percussion on the left. CT scan was ordered and shows a left _____ [Blank 6] effusion and acute pneumothorax due to infectious process. Probable comprehensive _____[Blank 7].

MEDICATIONS

1. Adalat 30 mg _____[Blank 8].
2. Atenolol 50 mg (half dose) q.d.
3. Flonase 50 mcg one spray on each side q.d.
4. Zolofl 100 mg once q.d.

PLAN

1. Admit patient to the unit for treatment and possible left _____[Blank 9] if indicated by lack of improvement on standard therapy.
2. Treat with a course of _____[Blank 10] for the URI.
3. _____[Blank 11] therapy if indicated by O2 sats.
4. Repeat CT scan in 48 hours.

Joyce Mathers, MD, Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDl) formatting standards.

Check your answers: ³

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Medical Terms in Context

Place the following medical terms in context to complete the scenario below:

Respiratory System Consultation Report (Text Version)

Fill in the consultation report with correct words listed below:

- Kidney
- respiratory
- childhood
- urinalysis
- shadowing
- mid-thoracic
- pulmonary
- hepatotoxic
- x-ray
- apex
- dyspnea
- flu shot
- myoplasmal
- rasping
- rhinorrhea
- expiration
- rales
- vaccine

RESPIRATORY SYSTEM – CONSULTATION REPORT

PATIENT NAME: Mateo DIAZ

AGE: 22

DOB: June 25

SEX: Male

DATE OF CONSULTATION: April 16

CONSULTING PHYSICIAN: Joyce Mathers, MD Pulmonology

HISTORY: This 22-year-old Hispanic gentleman is referred to me for a 2-week history of new rasping cough associated with a dull right _____[Blank 1] intercostal discomfort. He has some associated _____[Blank 2] on exertion but is otherwise well with no presenting symptoms of a cold or _____[Blank 3] infection. No fever, sputum or _____[Blank 4].

PAST HISTORY: He has a history of _____[Blank 5] asthma that seemed to disappear after he hit his mid-20s. He has a history of extensive travel for work and leisure and most recently was on a work trip to Wuhan, China in late December. He receives a _____[Blank 6] annually and did have the most recent _____[Blank 7] in October 2019.

His physical exam is relatively unremarkable. Blood pressure is 120/83, respirations 12. Temperature normal at 37. Chest exam is CTA with no _____[Blank 8], rhonchi or wheezes. Even on a forced exhalation, we could not reproduce the _____[Blank 9] cough symptom.

ASSESSMENT: A PA and lateral chest _____[Blank 10] revealed a new infiltrate and _____[Blank 11] along the left mid-lung margin all the way to the _____[Blank 12]. Spirometry showed normal pressures on forced _____[Blank 13].

PLAN

1. Rule out _____[Blank 14] pneumonia versus other lung infection or infiltrates such as granulomatosis, aspergillosis or sarcoidosis.
2. CBC with differential, chem panel, ESR, ACE, and mycoplasma titres.
3. Repeat full function tests (PFTs) in 2 weeks.

If required, will treat with Amphotericin B, Tosufloxacin, Macrolide or similar. If any of these treatments are indicated, weekly LFTs and _____[Blank 15] function testing will be required as these classes of drugs is notoriously _____[Blank 16] and nephrotoxic.

I will see the patient again in approximately 4 days to review the results and decide on a course of action – more testing or appropriate treatments as indicated above.

Joyce Mathers, MD Pulmonology

Note: Report samples (H5P and Pressbooks) are to encourage learners to identify correct medical terminology and do not represent the Association for Health Documentation Integrity (AHDI) formatting standards.

Check your answers: ⁴

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Test Your Knowledge

Test your knowledge by answering the questions below:

Respiratory System Glossary Reinforcement Activity (Text Version)

1. A small bulbous, teardrop-shaped structure located at the apex of the soft palate is called the _____[Blank 1].
 - a. Lymphocytes
 - b. Posterior
 - c. Uvula
2. Located at the anterior region of the nasal cavity and is composed of bone is the _____[Blank 2].
 - a. Glottis
 - b. Fauces
 - c. Hard Palate
3. A ridge of cartilage that separates the two main bronchi is called the _____[Blank 3].
 - a. Carina

- b. Eupnea
 - c. Alveolar Duct
4. _____[Blank 4] serves as an airway and is continuous with the nasal cavity.
- a. Conducting zone
 - b. Nasopharynx
 - c. Hilum
5. _____[Blank 5] consists of the surface and skeletal structure that result in the outward appearance of the nose and contribute to its numerous functions.
- a. Pharynx
 - b. Inferior
 - c. External nose

Check your answers: ⁵

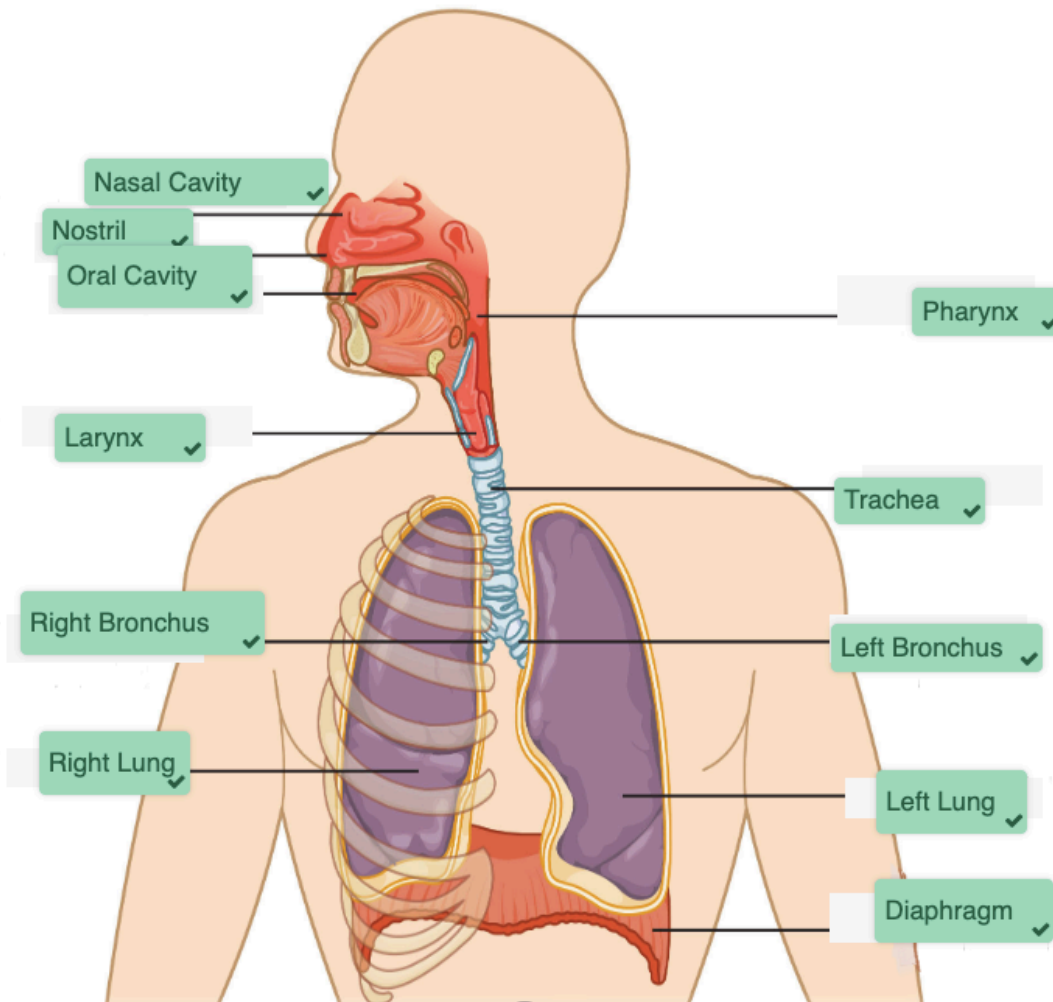
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Notes

Respiratory System Anatomy



1.

Check your

answers: Labeling the Respiratory System Diagram This is an anatomical diagram of the major organs and structure of the human respiratory system. Identified starting from the top of the diagram is the organs and structures which serve as a passageway for air and include, **nasal cavity** which warms and moistens the air, the **nostril** where air enters the respiratory system and travels to the **oral cavity** also know as the mouth, from the mouth the air moves to the **pharynx**, then to through the voice box correctly called the **larynx**, and passes into the **trachea** often referred to as the windpipe. The trachea bifurcates meaning it separates into two anatomical branches each leading to each lung, on the right side is the **right main bronchus** branch, on the left side, the **left main bronchus**. Air arrives at the lungs to allow for the exchange of gases arrives and enters on the right side into the **right lung** and on the left side the **left lung**. The muscular partition supporting the lungs known as the **diaphragm**. This detailed illustration supports understanding of the respiratory system's structure and function.

2. 1. Exert, 2. Breath, 3. Edema, 4. Allergens, 5. Heart failure, 6. Apnea, 7. HEENT, 8. Membranes, 9. Erythema, 10. Inspiration, 11. Lobes, 12. Edema, 13. Asthma, 14. Monitor, 15. Diuretic
3. 1. Dyspnea, 2. Hemoptysis, 3. COPD, 4. Wheezing, 5. Basal, 6. Pleural, 7. atelectasis , 8. q. d., 9. Thoracostomy, 10. Antibiotics, 11. Oxygen
4. 1. Mid-thoracic, 2. Dyspnea, 3. Respiratory, 4. Rhinorrhea, 5. Childhood, 6. Flu-shot, 7. Vaccine, 8. Rales, 9. Rasping, 10. X-ray, 11. Shadowing, 12. Apex, 13. Expiration, 14. Myoplasmal, 15. Urinalysis, 16. Pulmonary, 17. Kidney, 18. Hepatotoxic.
5. 1. Uvula, 2. Hard Palate, 3. Carina, 4. Nasopharynx, 5. External nose



Respiratory System Chapter 4 Worksheet

Instructions

Work through the chapter and find the meaning for the following prefixes, suffixes, and abbreviations. Add in any that are missing on the worksheet.

Prefixes and Suffixes

Prefix	Meaning	Suffix	Meaning
a-		-algia	
an-		-ar	
dys-		-ary	
endo-		-cele	
eu-		-centesis	
hyper-		-eal	
hypo-		-ectasis	
intra-		-emia	
poly-		-gram	
tachy-		-graph	
		-graphy	
		-meter	
		-metry	
		-pexy	
		-pnea	
		-rrhagia	
		-scope	
		-scopic	
		-scopy	
		-spasm	
		-stenosis	
		-stomy	
		-thorax	
		-tomy	
		-itis	
		-ectomy	
		-tome	
		-genic	
		-ic	
		-ia	

		-plasty	
		-oid	
		-logy	
		-logist	

Abbreviations

Abbreviation	Meaning
ABGs	
AFB	
ARDS	
C&S	
CAP	
CF	
CO2	
COPD	
CPAP	
CT	
CXR	
flu	
IPF	
LLL	
LTB	
LUL	
O2	
OSA	
PE	
PFM	
PFTs	
RLL	
RML	
RUL	
SOB	
TB	
URI	
BiPAP	
CPT	
DPI	
IPPB	
MDI	
NIPPV	
PEP	

SVN	
VAP	

Words easily broken into word parts listed by combining form (root)

Review of Word Parts

Please note that sometimes words are made up of word parts but are not translated literally. Several combining forms are shown in bold below. List their meaning from chapter 4.

adenoid/o

1. adenoiditis
2. adenoidectomy
3. adenotome

alveol/o

4. alveolitis
5. alveolar

atel/o

6. atelectasis

bronch/o

7. bronchitis
8. bronchogenic carcinoma
9. bronchopneumonia
10. bronchoplasty
11. bronchoscope
12. bronchoscopy
13. bronchoalveolar
14. bronchospasm

bronchi/o

15. bronchiectasis

capn/o

16. capnometer
17. acapnia
18. hypercapnia

19. hypocapnia

diaphragmat/o

20. diaphragmatocele

21. diaphragmatic

epiglott/o

22. epiglottitis

hem/o

23. hemothorax

hemat/o

24. hematologist

25. hematology

laryng/o

26. laryngotracheobronchitis (LTB)

27. laryngoplasty

28. laryngostomy

29. laryngotracheotomy

30. laryngoscope

31. laryngoscopy

32. laryngeal

33. laryngospasm

34. laryngitis

lob/o

35. lobar pneumonia

36. lobectomy

muc/o

37. mucoid

38. mucous

nas/o

39. nasopharyngitis

40. nasopharyngeal

orth/o

41. orthopnea

ox/i

42. oximeter

43. anoxia

44. hypoxemia

45. hypoxia

pharyng/o

46. pharyngitis

phon/o

47. aphonia

48. dysphonia

phren/o

49. phrenalgia

50. phrenospasm

pleur/o

51. pleuritic

52. pleuritis

53. pleuropexy

54. intrapleural

pneum/o

55. pneumoconiosis

56. pneumonia

57. pneumonitis

58. pneumothorax

pneumon/o

59. pneumonectomy

pneumat/o

60. pneumatocele

pulmon/o

- 61. pulmonary embolism
- 62. pulmonary
- 63. pulmonologist
- 64. pulmonology

py/o

- 65. pyothorax

radi/o

- 66. radiograph
- 67. radiography
- 68. radiologist
- 69. radiology

rhin/o

- 70. rhinitis
- 71. rhinomycosis
- 72. rhinorrhagia
- 73. rhinoplasty
- 74. rhinorrhea

sept/o

- 75. septoplasty
- 76. septotomy

sinus/o

- 77. sinusitis
- 78. sinusotomy

somn/o

- 79. polysomnography (PSG)

son/o

- 80. sonogram
- 81. sonography

spir/o

- 82. spirometer
- 83. spirometry

thorac/o

- 84. thoracalgia
- 85. thoracocentesis
- 86. thoracentesis
- 87. thoracotomy
- 88. thoracoscopy
- 89. thoracic
- 90. thoracoscope

tom/o

- 91. tomography

tonsill/o

- 92. tonsillitis
- 93. tonsillectomy

trache/o

- 94. tracheitis
- 95. tracheoplasty
- 96. tracheostomy
- 97. tracheotomy
- 98. endotracheal
- 99. tracheostenosis

Words built from word parts without combining forms:

- 100. endoscope
- 101. endoscopic
- 102. endoscopy
- 103. apnea
- 104. dyspnea
- 105. eupnea
- 106. hypopnea
- 107. tachypnea

Define the following words not built from word parts:

- 108. epistaxis
- 109. influenza (flu)

110. pleural effusion
111. pulmonary edema
112. pulmonary embolism
113. upper respiratory infection
114. stethoscope
115. asphyxia
116. aspirate
117. mucus
118. nebulizer
119. nosocomial infection
120. sputum
121. ventilator

Words Not Easily Broken into Word Parts

(Respiratory)



Words Not Easily Broken into Word Parts

Instructions

Type the words listed below this section. Define the word in your own words. Please number the terms.

Example

1. Cancer - A disease caused by an uncontrolled division of abnormal cells in a part of the body

Term List:

Type these terms and provide a definition for the words not easily built from word parts:

1. Asphyxia
2. Epistaxis
3. Phlegm



Abbreviations - Respiratory

Instructions

Type the abbreviation found in the listing below. Alternatively, the words could also be written out on a plain sheet of paper. Translate the abbreviation and then define the abbreviation in your own words. In the document, be sure to number each abbreviation.

Example

AIDS acquired immunodeficiency syndrome - chronic immune system suppression caused by human immunodeficiency virus (HIV) infection

Abbreviation List:

1. **ABGs**
2. **COPD**
3. **PE**
4. **SOB**
5. **URI**



Definitions Using Word Parts - Respiratory

Instructions

Type the terms from the numbered list found below. For each term keyed, divide the combining form, suffix, and prefix with a slash to show the individual word parts. Then define the term in your own words according to the rules provided in the resource (reading from the suffix, then back to the beginning of the word, then across). Be sure to number each term in your document.

Example

hepat/itis - inflammation of the liver

Define the following terms by breaking into word parts:

1. Adenoidectomy
2. Alveolar
3. Apnea
4. Atelectasis
5. Bradypnea
6. Bronchiectasis
7. Bronchitis
8. Bronchoscope
9. Bronchoscopy
10. Bronchospasm
11. Capnometer
12. Diaphragmatic
13. Dyspnea

14. **Dysphonia**
15. **Endoscopic**
16. **Endotracheal**
17. **Epiglottitis**
18. **Eupnea**
19. **Hemoptysis**
20. **Hemothorax**
21. **Hypercapnia**
22. **Hypoxemia**
23. **Hypoxia**
24. **Laryngeal**
25. **Laryngoscope**
26. **Laryngoscopy**
27. **Laryngospasm**
28. **Laryngotracheotomy**
29. **Lobectomy**
30. **Mucoid**
31. **Nasopharyngeal**
32. **Nasoseptal**
33. **Orthopnea**
34. **Oximeter**
35. **Oximetry**

36. Phrenic
37. Pleurocentesis
38. Pneumatocele
39. Pneumonectomy
40. Pneumonia
41. Pneumothorax
42. Polysomnography
43. Pulmonary
44. Pulmonologist
45. Pulmonology
46. Pyothorax
47. Respiriology
48. Rhinitis
49. Rhinoplasty
50. Rhinorrhagia
51. Rhinorrhea
52. Sinusitis
53. Spirometer
54. Spirometry
55. Tachypnea
56. Thoracalgia
57. Thoracentesis
58. Thoracotomy

- 59. Thoracoscopy**
- 60. Tonsillectomy**
- 61. Tonsillitis**
- 62. Tracheopexy**
- 63. Tracheotomy**
- 64. Tracheostomy**



Scenario - Respiratory

Instructions

Read aloud the following paragraph, paying close attention to the correct pronunciation of each medical term. Use the phonetic spelling provided with the term to guide you. At the conclusion of reading the paragraph and using this document, compose a list of the bolded medical terms and translate their correct meaning. Be sure to number each term in your list.

Scenario

Five-year-old Connor was taken to the emergency room by his parents. His mother stated that Connor's **pulmonary (PŪL-mō-ně-rē)** symptoms started earlier in the day. Upon admission the nurse noted Connor's lips were **cyanotic (sī-ăn-ŌT-ik)** and that he was experiencing **dyspnea (dis(p)-NĒ-ă)**, **rhinitis (rī-NĪ-tīs)** and having **laryngospasms (lăr-ĪN-gō-spăzm)**. During Connor's initial assessment, a pulse **oximeter (ok-SIM-ět-ěr)** was placed on his index finger indicating that he was suffering from **hypoxemia (hip-ok-SĒ-mē-ă)**.

The **pulmonologist (pul-mō-NOL-ō-jĭst)** completed a physical exam using a stethoscope to auscultate Connor's chest to determine if he might have **bronchitis (brong-KĪT-ĭs)**. The pulmonologist also used a tongue depressor to look in Connor's throat to rule out **tonsillitis (tōn-sĭl-Ī-tīs)**. The doctor also wanted to rule out any underlying infections that cause the **epiglottis (ep-i-GLOT-ĭs)** to become inflamed, thus causing epiglottitis (ĕp-ĭ-glōt-Ī-tīs).

The doctor ordered pulmonary function testing with the aid of a **spirometer (spĭ-RōM-ět-ěr)** to measure Connor's airflow. A chest x-ray was ordered. The x-ray showed signs of inflammation in Connor's bronchi.

The doctor ordered an antibiotic for 10 days. The nurse demonstrated **diaphragmatic (dĭ-ă-frăg-MAT-ik)** breathing exercises to Connor and his parents and stressed the importance of increasing his fluid intake.