

## 100-Question Multiple-Choice Quiz on Pneumococcal Pneumonia with Answers

1. What organism most commonly causes pneumococcal pneumonia?

- A. Staphylococcus aureus
- B. Streptococcus pneumoniae
- C. Klebsiella pneumoniae
- D. Haemophilus influenzae

Answer: B. Streptococcus pneumoniae

Explanation: Pneumococcal pneumonia is caused by Streptococcus pneumoniae, also known as pneumococcus. It is a leading cause of community-acquired pneumonia.

2. Streptococcus pneumoniae is classified as what type of bacterium?

- A. Gram-negative bacillus
- B. Gram-positive diplococcus
- C. Acid-fast bacillus
- D. Spirochete

Answer: B. Gram-positive diplococcus

Explanation: S. pneumoniae appears as lancet-shaped Gram-positive diplococci under the microscope.

3. Which age group is at highest risk for pneumococcal pneumonia?

- A. Teenagers
- B. Young adults
- C. Older adults over 65 years
- D. Middle-aged athletes

Answer: C. Older adults over 65 years

Explanation: Elderly individuals have weaker immune defenses, making them more susceptible to pneumococcal infections.

4. Which symptom is most commonly associated with pneumococcal pneumonia?

- A. Rash
- B. Sudden fever and productive cough
- C. Severe diarrhea
- D. Joint swelling

Answer: B. Sudden fever and productive cough

Explanation: Patients often present with abrupt onset fever, chills, cough, and sputum production.

5. What color is the classic sputum seen in pneumococcal pneumonia?

- A. Green
- B. Rust-colored
- C. Clear
- D. Black

Answer: B. Rust-colored

Explanation: Rust-colored sputum results from blood mixed with mucus and is a classic finding.

6. Which vaccine helps prevent pneumococcal pneumonia?

- A. MMR vaccine
- B. HPV vaccine
- C. Pneumococcal vaccine
- D. Rabies vaccine

Answer: C. Pneumococcal vaccine

Explanation: Pneumococcal vaccines such as PCV and PPSV protect against common pneumococcal strains.

7. What is the primary route of transmission of *Streptococcus pneumoniae*?

- A. Contaminated food
- B. Mosquito bites
- C. Respiratory droplets
- D. Skin contact

Answer: C. Respiratory droplets

Explanation: *Pneumococcus* spreads through coughing, sneezing, and close respiratory contact.

8. Which lung finding is common in pneumococcal pneumonia?

- A. Hyperinflation
- B. Consolidation
- C. Pneumothorax
- D. Fibrosis

Answer: B. Consolidation

Explanation: Alveoli fill with inflammatory exudate, producing lobar consolidation.

9. What is the most common type of pneumonia caused by *Streptococcus pneumoniae*?

- A. Interstitial pneumonia
- B. Aspiration pneumonia
- C. Lobar pneumonia
- D. Viral pneumonia

Answer: C. Lobar pneumonia

Explanation: Pneumococcal infection classically produces lobar pneumonia affecting one lobe.

10. Which diagnostic test is most useful initially for suspected pneumonia?

- A. Colonoscopy
- B. Chest X-ray
- C. ECG
- D. MRI of the brain

Answer: B. Chest X-ray

Explanation: Chest radiography helps confirm infiltrates and consolidation in pneumonia.

11. Which physical exam finding may occur in pneumococcal pneumonia?

- A. Bradycardia
- B. Crackles on auscultation
- C. Absent bowel sounds
- D. Enlarged thyroid

Answer: B. Crackles on auscultation

Explanation: Crackles result from fluid and inflammatory material in the alveoli.

12. Which antibiotic class is commonly used for pneumococcal pneumonia?

- A. Antifungals
- B. Beta-lactams
- C. Antivirals
- D. Antiparasitics

Answer: B. Beta-lactams

Explanation: Penicillins and cephalosporins are commonly used against pneumococcal infections.

13. Which chronic disease increases the risk of pneumococcal pneumonia?

- A. Osteoarthritis
- B. Diabetes mellitus
- C. Migraine
- D. Eczema

Answer: B. Diabetes mellitus

Explanation: Diabetes weakens immune responses and increases infection risk.

14. Which complication can occur from pneumococcal pneumonia?

- A. Appendicitis
- B. Meningitis
- C. Cataracts
- D. Kidney stones

Answer: B. Meningitis

Explanation: Pneumococcus can spread through the bloodstream and infect the meninges.

15. Which laboratory finding often occurs in bacterial pneumonia?

- A. Leukocytosis
- B. Severe anemia
- C. Low platelets only
- D. Elevated calcium

Answer: A. Leukocytosis

Explanation: Elevated white blood cell count reflects the body's inflammatory response.

16. Which group should routinely receive pneumococcal vaccination?

- A. Healthy infants only
- B. Adults older than 65 years
- C. Marathon runners
- D. Teenagers only

Answer: B. Adults older than 65 years

Explanation: Older adults are at increased risk for invasive pneumococcal disease.

17. What virulence factor helps *Streptococcus pneumoniae* evade phagocytosis?

- A. Flagella
- B. Capsule
- C. Endospore
- D. Pili

Answer: B. Capsule

Explanation: The polysaccharide capsule protects the bacteria from immune destruction.

18. Which symptom may indicate severe pneumonia?

- A. Mild itching
- B. Confusion
- C. Hair loss
- D. Sneezing only

Answer: B. Confusion

Explanation: Confusion, especially in older adults, may indicate hypoxia or severe infection.

19. Pneumococcal pneumonia most commonly affects which part of the respiratory system?

- A. Pleura only
- B. Alveoli
- C. Trachea only
- D. Nasal cavity

Answer: B. Alveoli

Explanation: Infection of the alveoli leads to inflammation and impaired gas exchange.

20. Which lifestyle factor increases pneumonia risk?

- A. Reading books
- B. Smoking
- C. Walking daily
- D. Drinking water

Answer: B. Smoking

Explanation: Smoking damages airway defenses and impairs clearance of bacteria.

21. What is dyspnea?

- A. Chest pain
- B. Difficulty breathing
- C. High blood pressure
- D. Fever

Answer: B. Difficulty breathing

Explanation: Dyspnea is a common symptom caused by impaired lung function.

22. Which oxygen-related problem may develop in severe pneumonia?

- A. Hyperglycemia
- B. Hypoxemia
- C. Hypercalcemia
- D. Hypertension

Answer: B. Hypoxemia

Explanation: Inflammation and fluid in the lungs reduce oxygen exchange.

23. What does CAP stand for?

- A. Chronic airway pressure
- B. Community-acquired pneumonia
- C. Cardiac arterial pressure
- D. Chronic abdominal pain

Answer: B. Community-acquired pneumonia

Explanation: Pneumococcal pneumonia is a common cause of community-acquired pneumonia.

24. Which imaging finding is classic for lobar pneumonia?

- A. Diffuse fibrosis
- B. Single lobe opacity
- C. Pleural calcification
- D. Hyperlucent lungs

Answer: B. Single lobe opacity

Explanation: Consolidation of a single lobe appears as an opacity on X-ray.

25. Which body system is primarily affected by pneumococcal pneumonia?

- A. Digestive system

- B. Respiratory system
- C. Endocrine system
- D. Skeletal system

Answer: B. Respiratory system

Explanation: The infection primarily involves the lungs and airways.

26. Which symptom often accompanies fever in pneumonia?

- A. Chills
- B. Blindness
- C. Tremors only
- D. Hearing loss

Answer: A. Chills

Explanation: Chills commonly occur due to the body's inflammatory response.

27. Which test can identify *Streptococcus pneumoniae* in sputum?

- A. Gram stain
- B. EEG
- C. Ultrasound
- D. Colon biopsy

Answer: A. Gram stain

Explanation: Gram stain can reveal Gram-positive diplococci.

28. What is pleuritic chest pain?

- A. Pain relieved by exercise
- B. Sharp pain worsening with breathing
- C. Abdominal pain after eating
- D. Burning leg pain

Answer: B. Sharp pain worsening with breathing

Explanation: Inflammation involving the pleura causes pain with inspiration.

29. Which condition predisposes patients to severe pneumococcal infection?

- A. Asthma
- B. Splenectomy
- C. Nearsightedness
- D. Acne

Answer: B. Splenectomy

Explanation: The spleen helps remove encapsulated organisms such as pneumococcus.

30. Which vital sign is commonly elevated in pneumonia?

- A. Temperature
- B. Height
- C. Vision score
- D. Reflexes

Answer: A. Temperature

Explanation: Fever is a hallmark of infection.

31. Which vaccine type contains polysaccharide antigens?

- A. PPSV23
- B. Influenza vaccine only
- C. Tetanus vaccine
- D. BCG vaccine

Answer: A. PPSV23

Explanation: PPSV23 contains purified polysaccharide antigens from pneumococcal strains.

32. What does tachypnea mean?

- A. Slow heart rate
- B. Rapid breathing
- C. Slow breathing
- D. Rapid pulse only

Answer: B. Rapid breathing

Explanation: Pneumonia often increases respiratory rate because of reduced oxygenation.

33. Which organism is encapsulated?

- A. *Streptococcus pneumoniae*
- B. *Mycoplasma pneumoniae*
- C. *Chlamydia pneumoniae*
- D. *Legionella pneumophila*

Answer: A. *Streptococcus pneumoniae*

Explanation: The capsule is a major virulence factor of pneumococcus.

34. Which antibiotic resistance concern exists with pneumococcus?

- A. Resistance to all medications
- B. Penicillin resistance
- C. Universal vancomycin resistance
- D. Resistance only to antifungals

Answer: B. Penicillin resistance

Explanation: Some strains have altered penicillin-binding proteins causing resistance.

35. What is bacteremia?

- A. Virus in the lungs
- B. Bacteria in the bloodstream
- C. Blood clot in the lungs
- D. Excess mucus

Answer: B. Bacteria in the bloodstream

Explanation: Pneumococcal pneumonia may spread into the blood causing bacteremia.

36. Which complication is life-threatening in severe pneumonia?

- A. Septic shock
- B. Tooth decay
- C. Cataracts
- D. Tendonitis

Answer: A. Septic shock

Explanation: Severe infection may lead to systemic inflammation and dangerously low blood pressure.

37. Which diagnostic test measures oxygen saturation?

- A. Pulse oximetry
- B. Echocardiogram
- C. Bone scan
- D. Endoscopy

Answer: A. Pulse oximetry

Explanation: Pulse oximetry noninvasively estimates blood oxygen levels.

38. What is the usual portal of entry for pneumococcus?

- A. Skin wounds
- B. Respiratory tract
- C. Gastrointestinal tract

D. Urinary tract

Answer: B. Respiratory tract

Explanation: Pneumococcus enters through inhalation into the respiratory system.

39. Which symptom may suggest hypoxia?

- A. Cyanosis
- B. Hair growth
- C. Weight gain
- D. Increased appetite

Answer: A. Cyanosis

Explanation: Bluish discoloration indicates inadequate oxygenation.

40. Which preventive measure reduces spread of respiratory infections?

- A. Sharing utensils
- B. Hand hygiene
- C. Avoiding sleep
- D. Excess sugar intake

Answer: B. Hand hygiene

Explanation: Proper handwashing reduces transmission of infectious organisms.

41. Which patient is at increased risk for aspiration and pneumonia?

- A. Healthy athlete
- B. Stroke patient with swallowing difficulty
- C. Child with normal health
- D. Teacher with allergies

Answer: B. Stroke patient with swallowing difficulty

Explanation: Impaired swallowing can allow secretions into the lungs.

42. What is the function of alveoli?

- A. Produce mucus
- B. Exchange gases
- C. Filter blood
- D. Digest nutrients

Answer: B. Exchange gases

Explanation: Oxygen and carbon dioxide exchange occurs in the alveoli.

43. Which symptom is more common in elderly patients with pneumonia?

- A. Confusion
- B. Hyperactivity
- C. Rash
- D. Nosebleeds

Answer: A. Confusion

Explanation: Older adults may present atypically with altered mental status.

44. Which medication may be required in severe cases?

- A. Oxygen therapy
- B. Antacids
- C. Insulin for everyone
- D. Eye drops

Answer: A. Oxygen therapy

Explanation: Supplemental oxygen helps correct hypoxemia.

45. Which blood test can help detect infection severity?

- A. Troponin only
- B. White blood cell count
- C. Blood type
- D. Calcium level only

Answer: B. White blood cell count

Explanation: Elevated WBC counts often indicate bacterial infection.

46. Which condition weakens immune defenses against pneumococcus?

- A. HIV infection
- B. Seasonal allergies
- C. Myopia
- D. Sprained ankle

Answer: A. HIV infection

Explanation: Immunocompromised individuals are highly susceptible to invasive disease.

47. Which chest X-ray finding may indicate pneumonia?

- A. Lung infiltrates
- B. Fractured rib only
- C. Enlarged liver
- D. Kidney stone

Answer: A. Lung infiltrates

Explanation: Inflammatory infiltrates appear as cloudy opacities.

48. Which microorganism category includes *Streptococcus pneumoniae*?

- A. Virus
- B. Fungus
- C. Bacterium
- D. Parasite

Answer: C. Bacterium

Explanation: Pneumococcus is a bacterial pathogen.

49. Which complication involves fluid around the lungs?

- A. Pleural effusion
- B. Hepatitis
- C. Gastritis
- D. Pancreatitis

Answer: A. Pleural effusion

Explanation: Fluid may accumulate in the pleural space during pneumonia.

50. Which symptom often worsens with exertion in pneumonia?

- A. Dyspnea
- B. Hair loss
- C. Sneezing
- D. Hiccups

Answer: A. Dyspnea

Explanation: Physical activity increases oxygen demand and worsens shortness of breath.

51. What is the purpose of sputum culture?

- A. Measure blood sugar
- B. Identify causative organisms
- C. Evaluate kidney function
- D. Detect fractures

Answer: B. Identify causative organisms

Explanation: Sputum cultures help determine the responsible bacteria and guide antibiotics.

52. Which vaccine is conjugated to improve immune response?

- A. PCV
- B. Rabies vaccine
- C. Yellow fever vaccine
- D. Polio vaccine only

Answer: A. PCV

Explanation: Pneumococcal conjugate vaccines enhance immune memory.

53. Which season sees increased pneumonia incidence?

- A. Summer only
- B. Winter
- C. Spring only
- D. Autumn only

Answer: B. Winter

Explanation: Respiratory infections spread more frequently during colder months.

54. Which physical sign may indicate consolidation?

- A. Increased tactile fremitus
- B. Absent pulse
- C. Dilated pupils
- D. Enlarged spleen

Answer: A. Increased tactile fremitus

Explanation: Consolidated lung tissue transmits vibrations more effectively.

55. Which structure is inflamed in pleurisy?

- A. Bronchi
- B. Pleura
- C. Alveoli only
- D. Diaphragm only

Answer: B. Pleura

Explanation: Pleurisy refers to inflammation of the pleural lining.

56. Which symptom combination strongly suggests pneumonia?

- A. Fever, cough, and chest pain
- B. Rash and vomiting
- C. Hearing loss and fatigue
- D. Joint stiffness only

Answer: A. Fever, cough, and chest pain

Explanation: These are common classic symptoms of pneumonia.

57. Which population has immature immunity increasing pneumonia risk?

- A. Elderly only
- B. Infants
- C. Athletes
- D. Office workers

Answer: B. Infants

Explanation: Young children have underdeveloped immune systems.

58. Which condition may follow untreated pneumonia?

- A. Lung abscess
- B. Cataracts
- C. Kidney failure always
- D. Appendicitis

Answer: A. Lung abscess

Explanation: Severe infection may destroy tissue and form abscesses.

59. Which organism commonly colonizes the nasopharynx?

- A. *Streptococcus pneumoniae*
- B. *Salmonella typhi*
- C. *Vibrio cholerae*
- D. *Plasmodium falciparum*

Answer: A. *Streptococcus pneumoniae*

Explanation: Pneumococcus often asymptotically colonizes the upper airway.

60. Which symptom may occur because of pleural involvement?

- A. Sharp chest pain
- B. Blurred vision
- C. Foot swelling only
- D. Back rash

Answer: A. Sharp chest pain

Explanation: Inflamed pleura causes pain with breathing.

61. Which blood culture result may occur in invasive disease?

- A. Positive for pneumococcus
- B. Positive for fungi only
- C. No white cells
- D. Elevated insulin

Answer: A. Positive for pneumococcus

Explanation: Blood cultures can detect bacteremia caused by pneumococcus.

62. Which breathing sound may be heard over consolidation?

- A. Bronchial breath sounds
- B. Silent lungs always
- C. Cardiac murmur
- D. Stridor only

Answer: A. Bronchial breath sounds

Explanation: Consolidated lung tissue transmits bronchial sounds more clearly.

63. What is sepsis?

- A. Mild cough
- B. Life-threatening response to infection
- C. Skin allergy
- D. Muscle injury

Answer: B. Life-threatening response to infection

Explanation: Severe infection can trigger systemic inflammation and organ dysfunction.

64. Which type of immunity is stimulated by vaccines?

- A. Passive immunity
- B. Active immunity
- C. Innate immunity only
- D. Genetic immunity

Answer: B. Active immunity

Explanation: Vaccines stimulate the body to produce protective immune responses.

65. Which patient behavior improves recovery from pneumonia?

- A. Smoking cigarettes
- B. Adequate hydration and rest
- C. Skipping antibiotics
- D. Avoiding fluids

Answer: B. Adequate hydration and rest

Explanation: Fluids and rest support immune function and recovery.

66. Which antibiotic may be used for resistant pneumococcal strains?

- A. Vancomycin
- B. Aspirin
- C. Acetaminophen
- D. Insulin

Answer: A. Vancomycin

Explanation: Severe resistant infections may require vancomycin.

67. Which sign may indicate respiratory distress?

- A. Nasal flaring
- B. Hair growth
- C. Improved appetite
- D. Slow blinking

Answer: A. Nasal flaring

Explanation: Nasal flaring indicates increased work of breathing.

68. Which hospital treatment may be needed in severe pneumonia?

- A. Mechanical ventilation
- B. Physical therapy only
- C. Dialysis for all patients
- D. Eye surgery

Answer: A. Mechanical ventilation

Explanation: Severe respiratory failure may require ventilatory support.

69. What is a common source of pneumococcal spread?

- A. Airborne droplets from coughing
- B. Insect bites
- C. Contaminated soil
- D. Water exposure only

Answer: A. Airborne droplets from coughing

Explanation: Coughing releases infectious respiratory droplets.

70. Which chest examination finding may occur in consolidation?

- A. Dullness to percussion
- B. Hyperresonance
- C. Tympany
- D. Normal percussion only

Answer: A. Dullness to percussion

Explanation: Consolidated lung tissue produces dull percussion notes.

71. Which patient is most likely to need hospitalization?

- A. Healthy adult with mild cough
- B. Elderly patient with low oxygen levels
- C. Teenager with sore throat
- D. Child with runny nose

Answer: B. Elderly patient with low oxygen levels

Explanation: Hypoxia and advanced age increase severity risk.

72. Which structure prevents food from entering the airway?

- A. Epiglottis
- B. Ureter
- C. Aorta
- D. Retina

Answer: A. Epiglottis

Explanation: The epiglottis closes during swallowing to protect the airway.

73. Which symptom is common in bacterial pneumonia but less common in viral infections?

- A. Productive cough
- B. Sneezing
- C. Mild fatigue only
- D. Itchy eyes

Answer: A. Productive cough

Explanation: Bacterial pneumonia often causes purulent sputum production.

74. Which laboratory marker may rise in bacterial infections?

- A. C-reactive protein
- B. Hemoglobin only
- C. Potassium only
- D. Vitamin D only

Answer: A. C-reactive protein

Explanation: CRP is an inflammatory marker elevated in infection.

75. What is the main goal of antibiotic therapy?

- A. Reduce appetite
- B. Eliminate bacteria
- C. Increase blood sugar
- D. Cause sedation

Answer: B. Eliminate bacteria

Explanation: Antibiotics target and kill susceptible bacteria.

76. Which vaccine schedule is recommended for many children?

- A. Pneumococcal conjugate vaccine series
- B. No vaccines
- C. Malaria vaccine only
- D. Tetanus booster daily

Answer: A. Pneumococcal conjugate vaccine series

Explanation: Childhood vaccination reduces invasive pneumococcal disease.

77. Which condition increases aspiration risk?

- A. Alcohol intoxication
- B. Good hydration
- C. Daily exercise
- D. Healthy diet

Answer: A. Alcohol intoxication

Explanation: Impaired consciousness increases aspiration risk.

78. Which symptom may indicate worsening pneumonia?

- A. Increasing shortness of breath

- B. Improved appetite
- C. Better sleep
- D. Lower fever after recovery

Answer: A. Increasing shortness of breath

Explanation: Progressive dyspnea may indicate worsening infection or respiratory failure.

79. Which immune cell helps fight bacterial infections?

- A. Neutrophils
- B. Red blood cells
- C. Platelets only
- D. Osteocytes

Answer: A. Neutrophils

Explanation: Neutrophils are key defenders against bacterial pathogens.

80. Which healthcare setting increases risk for resistant infections?

- A. Long hospital stays
- B. Outdoor exercise
- C. Gardening
- D. Reading books

Answer: A. Long hospital stays

Explanation: Hospital exposure increases risk for resistant bacteria.

81. Which symptom may occur in children with pneumonia?

- A. Grunting respirations
- B. Hair discoloration
- C. Tooth pain only
- D. Ear itching

Answer: A. Grunting respirations

Explanation: Children may grunt to improve oxygenation and keep alveoli open.

82. Which condition involves inflammation of the lungs?

- A. Pneumonia
- B. Arthritis
- C. Gastritis
- D. Dermatitis

Answer: A. Pneumonia

Explanation: Pneumonia is infection and inflammation of lung tissue.

83. Which pneumococcal disease affects the brain coverings?

- A. Meningitis
- B. Hepatitis
- C. Nephritis
- D. Pancreatitis

Answer: A. Meningitis

Explanation: Pneumococcus can infect the meninges causing meningitis.

84. Which sign suggests dehydration in pneumonia patients?

- A. Dry mucous membranes
- B. Excess tearing
- C. Excess saliva
- D. Slow nail growth

Answer: A. Dry mucous membranes

Explanation: Fever and poor intake may lead to dehydration.

85. Which habit helps prevent respiratory infections?

- A. Smoking
- B. Vaccination
- C. Sleep deprivation
- D. Avoiding handwashing

Answer: B. Vaccination

Explanation: Vaccines reduce risk of infection and severe disease.

86. Which test may assess severity of hypoxemia?

- A. Arterial blood gas
- B. Stool test
- C. Vision screening
- D. Skin biopsy

Answer: A. Arterial blood gas

Explanation: ABG measures oxygen and carbon dioxide levels in blood.

87. Which pneumonia complication involves pus in the pleural space?

- A. Empyema
- B. Edema
- C. Anemia
- D. Arrhythmia

Answer: A. Empyema

Explanation: Empyema is a collection of infected pus in the pleural cavity.

88. Which condition is characterized by low blood oxygen?

- A. Hypoxemia
- B. Hyperthermia
- C. Hyperglycemia
- D. Leukopenia

Answer: A. Hypoxemia

Explanation: Pneumonia can impair oxygen transfer into the bloodstream.

89. Which factor improves outcomes in pneumonia?

- A. Delayed treatment
- B. Early diagnosis and treatment
- C. Avoiding antibiotics when needed
- D. Smoking more cigarettes

Answer: B. Early diagnosis and treatment

Explanation: Prompt therapy reduces complications and mortality.

90. Which sign may indicate fever?

- A. Elevated body temperature
- B. Low pulse only
- C. Improved concentration
- D. Pale nails only

Answer: A. Elevated body temperature

Explanation: Fever reflects the body's immune response to infection.

91. Which group of bacteria does *Streptococcus pneumoniae* belong to?

- A. Streptococci
- B. Staphylococci
- C. Mycobacteria

## D. Spirochetes

Answer: A. Streptococci

Explanation: Pneumococcus belongs to the streptococcal group of bacteria.

92. Which symptom may accompany severe infection in older adults?

- A. Lethargy
- B. Increased athletic ability
- C. Improved memory
- D. Increased appetite only

Answer: A. Lethargy

Explanation: Severe infection may cause weakness and reduced alertness.

93. Which preventive strategy is especially important for smokers?

- A. Smoking cessation
- B. More cigarette use
- C. Avoiding exercise
- D. High sugar intake

Answer: A. Smoking cessation

Explanation: Quitting smoking improves lung defense mechanisms.

94. Which medication type treats fever and discomfort in pneumonia?

- A. Antipyretics
- B. Anticoagulants
- C. Antifungals only
- D. Sedatives only

Answer: A. Antipyretics

Explanation: Antipyretics such as acetaminophen help reduce fever.

95. Which complication may occur when infection spreads systemically?

- A. Septicemia
- B. Cataracts
- C. Tendon rupture
- D. Gallstones

Answer: A. Septicemia

Explanation: Bacteria entering the bloodstream can lead to systemic infection.

96. Which type of cough is common in pneumococcal pneumonia?

- A. Productive cough
- B. Silent cough
- C. Barking cough only
- D. No cough ever

Answer: A. Productive cough

Explanation: Infected lungs produce mucus and sputum.

97. Which healthcare intervention helps loosen secretions?

- A. Adequate hydration
- B. Dehydration
- C. Smoking
- D. Bed rest only

Answer: A. Adequate hydration

Explanation: Fluids thin mucus, making it easier to clear secretions.

98. Which finding may indicate severe respiratory compromise?

- A. Use of accessory muscles
- B. Mild sneezing
- C. Normal breathing
- D. Stable appetite

Answer: A. Use of accessory muscles

Explanation: Accessory muscle use indicates increased work of breathing.

99. Which population benefits greatly from herd immunity through vaccination?

- A. Immunocompromised individuals
- B. Healthy athletes only
- C. Tourists only
- D. Pilots only

Answer: A. Immunocompromised individuals

Explanation: Herd immunity helps protect vulnerable individuals who may not respond well to vaccines.

100. What is the overall purpose of pneumococcal vaccination?

- A. Increase blood pressure
- B. Prevent pneumococcal disease and complications
- C. Treat viral infections only
- D. Replace antibiotics entirely

Answer: B. Prevent pneumococcal disease and complications

Explanation: Vaccination reduces the incidence, severity, and complications of pneumococcal infections.