

# Vital Signs

*Study Guide and Practice Questions*



# Practice Questions about Vital Signs:

## Fb/Nurse Info

### 1. What are the most common Vital Signs?

Pulse Rate, Respiratory Rate, Blood Pressure, Body Temperature, and Oxygen Saturation.

### 2. What is the normal pulse rate?

60–100 beats/minute.

### 3. Where can you find the pulse?

The radial, brachial, femoral, and carotid arteries.

### 4. What is the normal respiratory rate?

12–20 breaths/minute.

### 5. What is the normal Blood Pressure?

110–120/70–80.

### 6. What is the normal body temperature?

Oral: 97.7–99.5 F (36.5–37.5 C); Axillary: 96.7–98.5 F (35.9–36.9 C); Rectal or ear: 98.7–100.5 F (37.1–38.1 C).

**7. What is the normal Oxygen Saturation?**

95–99% or greater than 93%.

**8. What is the normal Heart Rate?**

60–100.

**9. A low oxygen saturation is a good indicator of what?**

Hypoxemia.

**10. What are complications with pulse oximeters?**

Low perfusion, incorrectly fitted probe, the vascular bed is not pulsating dark fingernails, or the light is unable to pass through.

**11. What is the accuracy range on a pulse oximeter?**

+ or – 4%

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**12. What is the heart rate for someone who is bradycardic?**

Less than 60 beats per minute.

**13. What is the respiratory rate for someone who is tachypneic?**

Greater than 20 breaths per minute.

**14. What is the blood pressure for someone with hypotension?**

Less than 90/60.

**15. What is the breathing rate of someone who is apneustic?**

Long gasping inspirations with insufficient expiration.

**16. What are the primary causes of eupnea?**

The normal physiology of being a human being.

**17. Identify the following breathing pattern: Fast and deep breaths with periods of apnea and no set rhythm.**

Biot's breathing.

**18. Which breathing pattern is normal in newborns and elderly, but abnormal for healthy adults?**

Cheyne-Stokes. **Fb/Nurse Info**

**19. What is a major tool in finding vital signs?**

Stethoscope, especially for Respiratory Therapists.

**20. What possible causes is Kussmaul's breathing an indicator of?**

DKA, severe hemorrhage, peritonitis, renal failure, and uremia.

**21. What is normally the heart rate for a newborn?**

90–180 beats per minute.

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**22. If a patient's heart rate is greater than 100 beats/minute, you would say the patient is?**

Tachycardic.



**23. What is DKA?**

It stands for Diabetic Ketoacidosis. A shortage of insulin which causes the body to burn fatty acids and produce acidic ketone bodies.

**24. The pulse rate and rhythm can be measured by what?**

It can be measured by auscultation or palpation of any artery.

**25. What arteries can be used for the pulse to be checked?**

Radial Artery, Brachial Artery, Femoral Artery, Carotid Artery, and Pedal.

**26. Which artery is most commonly used to check for a pulse?**

Radial Artery

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**27. How is pulse calculated?**

The pulse is counted for 15 seconds and multiplied by 4 to get beats/minute.

**28. How is respiratory rate measured?**

By inspection of the movement of the chest for 1 minute.

**29. What is the normal blood pressure for adults?**

110-120/70-80

**30. What is used to measure blood pressure?**

Sphygmomanometer.

**31. What are the ways that the body temperature can be measured?**

Orally, rectally, and axillary.

**32. What is the normal body temperature?**

37 degrees Celsius ( 97 degrees F).

**33. What is fever?**

A higher than normal body temperature (hyperthermia).

**34. What is the normal pulse rate for an adult?**

60–100 beats/minute.

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**35. What does pulse oximetry estimate?**

It noninvasively estimates the hemoglobin oxygen saturation of arterial blood.

**36. What factors affect the accuracy of pulse oximetry reading?**

Movement, bright light, extreme cold, extreme darkness, and high methemoglobin.

**37. What would you call a respiratory rate less than 12?**

Bradypnea.

**38. What would you call a respiratory rate greater than 20?**

Tachypnea.

**39. What would you call a heart rate less than 60?**

Bradycardia.

**40. What would you call a heart rate greater than 100?**

Tachycardia.

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**41. What is hypotension?**

A blood pressure less than 90/60.

**42. What is hypertension?**

A blood pressure greater than 140/90.

**43. What is the normal newborn pulse?**

90–170/minute.

**44. What is the normal 1-year-old pulse?**

80–160/minute.



**45. What is the normal preschool-age kid pulse?**

80–120/minute.

**46. What is the normal 10-year-old pulse?**

70–110/minute.

**47. What is the normal adult pulse?**

60–100/minute.

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**48. What is the systolic blood pressure?**

The top number which measures the pressure in the artery when the heart beats.

**49. What is the diastolic blood pressure?**

The bottom number that measures the pressure in the arteries when the heart muscle is resting.

**50. How is the strength (amplitude) of a pulse measured on a scale?**

4–bounding, 3–full, 2–normal, 1–diminished, and 0–absent.

**51. What is bradycardia?**

A slower than normal heart rate of less than 60 beats per minute.

**52. What is tachycardia?**

A faster than normal heart rate greater than 100 beats per minute.

**52. What is tachycardia?**

A faster than normal heart rate greater than 100 beats per minute.

**53. What is hypotension?**

Low blood pressure, which can cause dizziness or fainting (Less than 90/60).

**54. What is hypertension?**

High blood pressure, which can cause heart disease (Greater than 140/90).

**55. What is eupnea?**

A normal respiratory rate (12-20 breaths per minute), normal rhythm. Causes: normal physiology.

**56. What is apnea?**

The absence of breathing. Causes: respiratory or cardiac arrest and an increased intracranial pressure.

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**57. What are the types of pulse oximetry probes?**

Finger probe, foot probe, toe probe, forehead probe, and ear probe.

**58. Can cool or heated aerosols affect a body temperature reading?**

Yes, yes they absolutely can.