

birth indicate the presence of fluid, which represents the normal transition of the lungs to extrauterine life. However, wheezes, persistence of medium or coarse crackles after the first few hours of life, and stridor should be reported for further investigation.

## Heart

Heart rate is auscultated and may range from 100 to 180 beats/min shortly after birth and, when the infant's condition has stabilized, from 120 to 140 beats/min. The point of maximum intensity (PMI) may be palpated and is usually found at the fourth to fifth intercostal space, medial to the left midclavicular line. The PMI gives some indication of the location of the heart, which may be displaced in conditions, such as congenital diaphragmatic hernia or pneumothorax. **Dextrocardia**, an anomaly wherein the heart is on the right side of the body, is reported because the abdominal organs may also be reversed, with associated circulatory abnormalities.

Auscultation of the specific components of the heart sounds is difficult because of the rapid rate and effective transmission of respiratory sounds. However, the first ( $S_1$ ) and second ( $S_2$ ) sounds should be clear and well defined; the second sound is somewhat higher in pitch and sharper than the first. A murmur is frequently heard in newborns, especially over the base of the heart or at the left sternal border at the third or fourth interspace. In newborns, a murmur is not necessarily associated with specific cardiac defects but frequently represents the incomplete functional closure of fetal shunts. (See [Chapter 4](#) for other characteristics of murmurs.) However, always record and report all murmurs and other unusual heart sounds.

## Abdomen

The normal contour of the abdomen is cylindric and usually prominent with few visible veins. Bowel sounds are heard within the first 15 to 20 minutes after birth. Visible peristaltic waves may be observed in some newborns.

Inspect the umbilical cord to determine the presence of two arteries, which look like papular structures, and one vein, which has a larger lumen than the arteries and a thinner vessel wall. At birth, the umbilical cord appears bluish white and moist. After clamping, it begins to dry and appears a dull, yellowish brown. It