

the infant from progressing uneventfully through the early postnatal period. With shorter hospitalizations, the accomplishment of thorough newborn assessment and parent teaching may be a challenge.

Initial Assessment: Apgar Scoring

The most frequently used method to assess newborns' immediate adjustment to extrauterine life is the **Apgar** scoring system, which is based on newborn heart rate, respiratory effort, muscle tone, reflex irritability, and color ([Table 7-1](#)). Each item is given a score of 0, 1, or 2. Evaluations of all five categories are made at 1 and 5 minutes after birth and repeated until the infant's condition stabilizes. Total scores of 0 to 3 represent severe distress, scores of 4 to 6 signify moderate difficulty, and scores of 7 to 10 indicate absence of difficulty in adjusting to extrauterine life. The Apgar score is affected by the degree of physiologic immaturity, infection, congenital malformations, maternal sedation or analgesia, and neuromuscular disorders.

TABLE 7-1
Infant Evaluation at Birth—Apgar Scoring System

Sign	0	1	2
Heart rate	Absent	Slow, <100 beats/min	>100 beats/min
Respiratory effort	Absent	Irregular, slow, weak cry	Good, strong cry
Muscle tone	Limp	Some flexion of extremities	Well flexed
Reflex irritability	No response	Grimace	Cry, sneeze
Color	Blue, pale	Body pink, extremities blue	Completely pink

The Apgar score reflects the general condition of the infant at 1 and 5 minutes based on the five parameters described earlier. The Apgar score is not a tool, however, that stands on its own to interpret past events, determine need for newborn resuscitation, or predict future events linked to the infant's eventual neurologic or physical status. Considerable discussion and controversy have centered on Apgar scoring because of its misuse as an indicator for the presence or absence of perinatal asphyxia in the medicolegal field ([American Academy of Pediatrics, Committee on Fetus and Newborn and American College of Obstetricians and Gynecologists, Committee on Obstetric Practice, 2006](#)).