

**TABLE 9-3****Assessment of Infant Reflexes**

<b>Reflex</b>	<b>Description</b>	<b>Appearance/Disappearance</b>
<b>Rooting</b>	Touching baby's cheek causes head to turn toward the side touched.	Present in utero at 24 weeks; disappears 3–4 months; may persist in sleep 9–12 months
<b>Sucking</b>	Touching lips or placing something in baby's mouth causes baby to draw liquid into mouth by creating vacuum with lips, cheeks, and tongue.	Present in utero at 28 weeks; persists through early childhood, especially during sleep
<b>Bite</b>	Touching gums, teeth, or tongue causes baby to open and close mouth.	Disappears at 3–5 months when biting is voluntary, but seen throughout adult years in comatose person
<b>Babkin</b>	Pressure applied to palm causes baby to open mouth, close eyes.	Present at birth; disappears in 2 or 4 months
<b>Pupillary response</b>	Flashing light across baby's eyes or face causes constriction of pupils.	Present at 32 weeks of gestation; persists throughout life
<b>Blink</b>	Baby closes both eyes.	Remains throughout life
<b>Moro or startle</b>	Making a loud noise or changing baby's position causes baby to extend both arms outward with fingers spread, then bring them together in a tense, quivery embrace	Present at 28 weeks of gestation; disappears at 4–7 months
<b>Withdrawing</b>	Baby removes hand or foot from painful stimuli.	Present at birth; persists throughout life
<b>Colliding</b>	Baby moves arms up and face to side when object is in collision course with face.	Present at birth or shortly after; persists in modified form throughout life
<b>Palmar grasp</b>	Placing object or finger in baby's palm causes his or her fingers to close tightly around object.	Present at 32 weeks of gestation; disappears at 3–4 months, replaced by voluntary grasp at 4–5 months
<b>Plantar grasp</b>	Placing object or finger beneath toes causes curling of toes around object.	Present at 32 weeks of gestation; disappears at 9–12 months
<b>Tonic neck or fencing (TNR)</b>	Postural reflex is seen when infant lies on back with head turned to one side; arm and leg on the side toward which he or she is looking are extended while opposite limbs are flexed.	Present at birth; disappears at approximately 4 months
<b>Stepping, walking, dancing</b>	Holding baby upright with feet touching flat surface causes legs to prance up and down as if baby were walking or dancing.	Present at birth; disappears at approximately 2–4 months; with daily practice of reflex, infant may walk alone at 10 months
<b>Reaching</b>	Hand closes as it reaches toward and grasps at object at eye level.	Present shortly after birth if baby is upright; comes under voluntary control in several months
<b>Orienting</b>	Head and eyes turn toward stimulus of noise, accompanied by cessation of other activity, heartbeat change, and vascular constriction.	Present at birth; comes under voluntary control later; persists throughout life
<b>Attending</b>	Eyes fix on a stimulus that changes brightness, movement, or shape.	Present shortly after birth; comes under voluntary control later; persists throughout life
<b>Swimming</b>	Placing baby horizontally, supporting him or her under abdomen, causes baby to make crawling motions with his or her arms and legs while lifting head from surface as if he or she were swimming.	Present after 3 or 4 days; disappears at approximately 4 months; may persist with practice
<b>Trunk incurvation</b>	Stroking one side of spinal column while baby is on his or her abdomen causes crawling motions with legs, lifting head from surface, and incurvature of trunk on the side stroked.	Present in utero; then seen at approximately third or fourth day; persists 2–3 months

*continued*

**TABLE 9-3****Assessment of Infant Reflexes—continued**

<b>Reflex</b>	<b>Description</b>	<b>Appearance/Disappearance</b>
<b>Babinski</b>	Stroking bottom of foot causes big toe to raise while other toes fan out and curl downward.	Present at birth; disappears at approximately 9 or 10 months; presence of reflex later may indicate disease
<b>Landau</b>	Suspending infant in horizontal, prone position and flexing head against trunk causes legs to flex against trunk.	Appears at approximately 3 months; disappears at approximately 12–24 months
<b>Parachute</b>	Sudden thrusting of infant downward from horizontal position causes hands and fingers to extend forward and spread as if to protect self from a fall.	Appears at approximately 7–9 months; persists indefinitely
<b>Biceps</b>	Tap on tendon of biceps causes biceps to contract quickly.	Brisk in first few days, then slightly diminished; permanent
<b>Knee jerk</b>	Tap on tendon below patella or on patella causes leg to extend quickly.	More pronounced first 2 days; permanent

Data from references 38, 56, 91.