

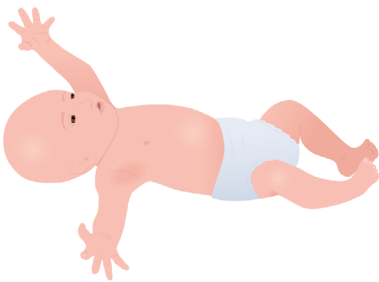


# NEWBORN REFLEXES



**Newborn reflexes** are involuntary motor responses originating from the brainstem in infants, which facilitate survival. They are usually inhibited by four to six months of age as the infant's brain matures and replaces primitive reflexes with voluntary motor activities. Assessment of these reflexes is an important component of the newborn exam. Absent or abnormal newborn reflexes may be a sign of central nervous system dysfunction and should be investigated promptly. There are many primitive reflexes. Some of the most commonly assessed are summarized here.

## Moro



- Protective response to disruption of body balance.
- Arms extend at the elbows and fingers spread, followed quickly by flexion of upper extremities and crying.
- Disappears by six months

## Tonic neck



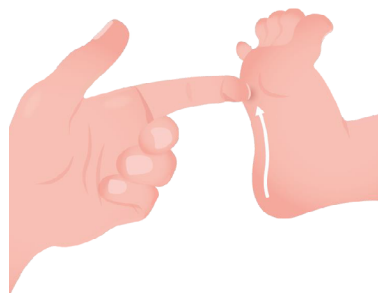
- Turning head to the side causes extension of the arm in the direction of the infant's gaze, accompanied by flexion of the contralateral arm.
- Disappears by three months of age

## Palmar grasp



- Sustained pressure to the palmar surface of the hand elicits grasping of the object providing the pressure.
- Disappears by six months of age

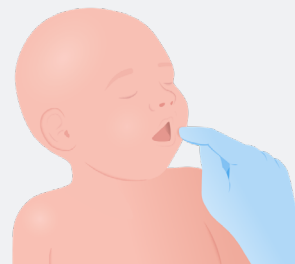
## Babinski



- Stimulation of the lateral foot results in dorsiflexion of the great toe and fanning of the other toes.
- Disappears by twelve months

## Primitive oral reflexes

- Facilitate early feeding behaviors
- Begin to wane around one month of life



## Rooting

Mouth turns toward objects that are near or touching the face.



## Sucking

Coordinates breathing and swallowing

## LEARNING TIP

Persistence of primitive reflexes beyond the expected time period or reemergence of a formerly extinguished reflex can point to neurological disease.

The presence of five or more abnormal reflexes is correlated with the development of cerebral palsy or other intellectual delays.