

The Apgar score is a widely used scoring system to assess the health of newborn immediately after birth to identify newborns that require prompt medical interventions. The Apgar score is determined by evaluating five simple criteria on a scale from 0 to 2, then summing up the five values (Table). The total Apgar score ranges from 0 to 10.

Table: Apgar Score.

Component	Score		
	0	1	2
Appearance (Skin colour/complexion)	Blue/pale all over	Blue at extremities (acrocyanosis) Body pink	No cyanosis body/extremities pink
Pulse (Pulse rate)	Absent	<100	>100
Grimace (Reflex irritability)	No response To stimulation	Grimace/feeble cry when stimulated	Cry or pull away when stimulated
Activity (Muscle tone)	None	Some flexion	Flexed arms and legs that resist extension
Respiration (Breathing)	Absent	Weak, irregular gasping	Strong, lusty cry

The test is usually done soon after birth at one minute and repeated at five minutes. Scores of 3 and below are generally regarded as critically low, 4 to 6 fairly low, and 7 to 10 generally normal. An Apgar score of less than 7 at one minute does not mean the newborn is unhealthy or abnormal. The score is recalculated at five minutes (after some attentions such as suctioning of airways and oxygenation) and special attentions and evaluations is require if the score does not improve. Apgar score is good predictor of mortality in newborns but do not predict the long term neurological or mental impairments.

The Apgar score was devised by Dr Virginia Apgar (7th June 1909–7th August 1974), a physician and an anaesthesiologist as a simple and repeatable method to quickly and summarily assess the health of newborn. Prior to the use of this scoring system, attention in the delivery room was mainly focused on the mother's condition and not the newborn's, unless the newborn was in obvious distress.

Virginia Apgar graduated from Columbia University, United States in 1933 and was one of the University's first female MDs. ¹ She was also one of the first American women to specialise in surgery. In 1949, she became Columbia's first-ever full Professor of Anaesthesiology. One of her interest was anaesthesia and childbirth. She invented this scoring system initially called the 'Newborn Scoring System' in 1949, presented it in 1952 and later published in 1953. ² The acronym APGAR, honouring the inventor was coined some 10 years after the initial publication as a mnemonic learning aid. The Apgar score had been translated in many different languages but still utilising the mnemonic. This score is now universally used and is the first evaluation all newborns get after being born.

REFERENCES

- 1: Virginia Apgar. About.com. Women's History. Available from http://womenshistory.about.com/od/physicians/p/virginia_apgar.htm (Accessed 1st July 2011).
- 2: Apgar V. A proposal for a new method of evaluation of the newborn infant. *Curr Res Anesth Analg* 1953; 32:260–7.

Note: Supplementary text included to enhance the education value