

Created by <u>Dr. Virginia Apgar</u> in 1952, the Apgar score is a simple method of quickly assessing a newborn's health and vital signs. The scoring system is common practice in hospitals today. There are five criteria that are assessed using the Apgar score.

	Apga	ar Scoring	g System	
Indicator		0 Points	1 Point	2 Points
Α	Activity (muscle tone)	Absent	Flexed limbs	Active
Ρ	Pulse	Absent	< 100 BPM	> 100 BPM
G	Grimace (reflex irritability)	Floppy	Minimal response to stimulation	Prompt response to stimulation
Α	Appearance (skin color)	Blue Pale	Pink body Blue extremeties	Pink
R	Respiration	Absent	Slow and irregular	Vigorous cry

Apgar Scores



A – Appearanc e



This is an evaluation of the baby's skin color/tone when they are born.

- Blue, pale 0 points
- Blue extremities, pink body 1 point
- Pink 2 points

P – Pulse

The medical team records the baby's heart rate.

- Absent heart rate 0 points
- Slow heart rate (below 100 bpm) 1 point
- Fast heart rate (over 100 bpm) 2 points

Apgar Scores



G – Grimace

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The medical team notes how the baby responds to stimuli.

- Floppy/no response 0 points
- Minimal response to stimuli 1 point
- Prompt response to stimuli 2 points

A – Activity

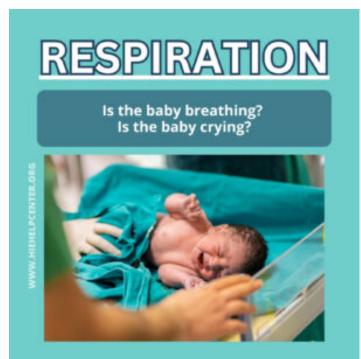
The medical team notes the baby's muscle tone/activity level.

- Absent 0 points
- Flexed arms and legs 1 point
- Active 2 points

Apgar Scores



R -Respiration



The medical team notes the baby's breathing ability.

- Not breathing 0 points
- Slow and irregular breathing 1 point
- Vigorous cry 2 points

How is an Apgar score calculated?

The five criteria are each scored as 0, 1, or 2 (two being the best), and the total score is calculated by then adding the five values obtained. Apgar scores are taken at the 1, 5, and 10 minute intervals.



What do Apgar scores mean?

- Scores of 0-3 are considered critical, especially in babies born at or near term
- Scores of 4-6 are considered below normal and indicate that the medical intervention is likely required
- Scores of 7+ are considered normal

There is evidence to suggest that infants whose Apgar scores remain low at five minutes or later are much more likely to suffer long-term neurological damage.

An HIE diagnosis can be difficult, but our team is here to help. Call us when vou're ready.

What is a good Apgar score?

A high Apgar score (closer to 10) is generally considered better than a low Apgar score (closer to 0). Babies with lower Apgar scores are <u>more likely</u> than babies with higher scores to need resuscitation. Sometimes, however, resuscitation must occur before an Apgar score is taken.

Assisted Apgar scores

If an infant undergoes resuscitation, the Apgar score given during resuscitation will <u>not be</u> <u>the same</u> as that given to a baby breathing on their own. Therefore, many have suggested that an assisted Apgar score be given to resuscitated babies. This score would account for resuscitation.



What's the relationship between Apgar scores, asphyxia, and HIE?

Asphyxia is the marked impairment of gas exchange, which can, if prolonged, lead to progressive hypoxemia and other complications. An Apgar score <u>alone cannot diagnose</u> asphyxia. A low Apgar score can simply mean that a baby is immature, not necessarily that they are suffering from asphyxia. However, continued lower Apgar scores can be evidence of asphyxia and <u>hypoxic-ischemic encephalopathy (HIE)</u>. The lower the Apgar score, the more alert the medical team should be to the possibility of the baby requiring intervention.

Higher Apgar scores, however, <u>do not rule out the possibility</u> that the baby has a brain injury, such as HIE. In all cases, physicians must recognize other signs and symptoms of damage in order to treat them both quickly and appropriately.

Other <u>signs and symptoms of</u> <u>HIE</u>

- Fetal heart rate patterns and abnormalities
- Clinical cerebral function
- Placental pathology
- Multisystem organ function
- Neuroimaging studies
- Neonatal electroencephalography





Medical negligence can cause HIE. Do you have a case? Call us today for a free legal consultation.

About Our Team

The HIE Help Center is an informational resource created by nurses and attorneys at <u>ABC Law</u> <u>Centers</u>. For over 25 years, our team has *solely* taken on legal cases that involve birth injuries, specifically those involving hypoxic-ischemic encephalopathy. Was your child diagnosed with HIE or a related birth injury? We can help! Give us a call today.

Sources:

Women's Health Care Physicians. (n.d.). Retrieved from https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/The-Apgar-Score (n.d.). Retrieved from https://www.uptodate.com/contents/overview-of-the-routine-management-of-the-healthy-new born-infant#H3