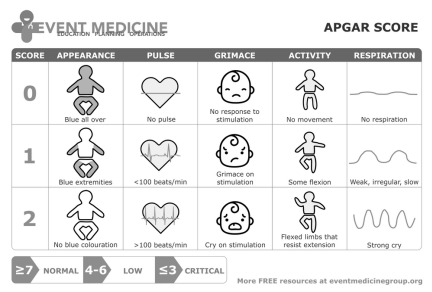
APGAR chart

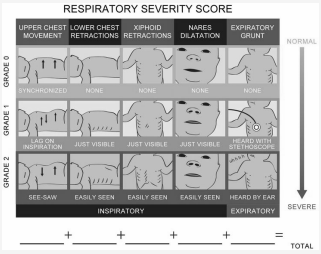


Poor Apgar Score

1st minute (9)	general condition (neuro/re-spi/circulatory)
5th minute (10)	Determine if neonate can adjust to extrauterine life
0-3	poor: severely depressed, needs CPR
4-6	fair: guarded, moderately depressed
7-10	good: healthy

Note: **Pulse** is the most important and **Color** is the least (**acrocyanosis** due to extrauterine adaptation)

Respiratory Evaluations



0 : Normal | **1-3** : Poor | **4-6** : Moderate | **7-10** : Severe

Normal Respiratory Adaptation

RR	30-60 bpm (80 bpm in 1st min)
Breathing	Use of abdominal muscles & diaphragm. Newborns are nose breathers

Normal Respiratory Adaptation (cont)

Reflex	Coughing & sneezing to clear airway

Initiation of repirations:

Chemical	surfactant reduces surface tension
Thermal	sudden chilling of moist infant
Mechanical	compression of fetal chest at delivery

Nursing Interventions

Assess	for Respiratory distress
Plan	To maintain a patent airway

Interventions

Position	Head lower
Suction	Bulb near the head, mouth first, avoid trauma to membranes

Evaluation

RR	30-60 bpm with no signs of distress

In order for the respiratory system to function the infant must have:
- adequate pulmonary blood flow
- adequate amount of surfactant
- strong respiratory musculature

Sepsis (blood infection)

Early onset	birth to 7 days after delivery
Late onset	8-28 days after birth
Nosocomial	1st week until discharge

Symptoms

- fever, breathing problems, lethargy
- poor feeding, bloated abdomen. vomiting (yellowish)
- Diarrhea, sleepiness, jaundiced, irregular HR
- low blood sugar and seizures

Sepsis (blood infection) (cont)

Treatment

- Sepsis is confirmed with culture test for 7-21 days
- Antibiotics to be given IV
- IV fluids to support the infant till infection clears
- Oxygen or ventilation to support breathing

Prevention

- Antibiotics to control dangerous bacteria
- Breastfeeding may help prevent sepsis
- Providing a clean place
- Delivery within 24 hrs after water breaks

Hyperbilirubinemia

Physiologic Jaundice

- Increase in bilirubin by 2nd day of life, declines in 5th
- Onset and resolution delayed in premature (5-14days)

Pathologic Jaundice

- Persistent jaundice may indicate hepatitis, biliar atresia, down syndrome, hypothyro-idism, breast milk inhibitors
- Total bilirubin increasing by >5mg/dl per day

Breastfeeding Jaundice

- appear on breastfed babies after 7 days of life
- peak during weeks 2-3 but may last for a month

Treatment

- Monitor how fast it has been rising
- Needs to be kept hydrated with breastmilk
- Feed baby often up to 12 times a day
- Phototherapy: blue light
- Blood transfusion, IV immunoglobulin

By **Dani** (Dan_Niel)
cheatography.com/dan-niel/

Published 14th February, 2021.
Last updated 14th February, 2021.

Prematurity (before 37 wks)

Physical Findings	*<2500g (5lb 8 oz)*
Sole creases, skull firmness, ear cartilage	
mother's report of last menstrual period	
sonographic estimation of gestational age	
Risk factors	
multiple gest., history of preterm, single teen mother	
Physical assessment	
AOG	less than 37 weeks
Respiratory	Irregular
Digestive	bowel sounds diminished
Thermoregulatory	hypothermia = hypoglycemia
Reflex	Poor suck, swallow, flexion
Nursing Care	
Prevention	Prevention of acquiring infection
Promote oxygenation	maintain and monitor body temp, apical pulse, respiratory rate
Provision	tactile stimulation for apnea
	safe and effective environment
Nutrition (readiness)	respiration is <60/m | rooting, sucking and gag reflex
Education of parents	
Handle carefully when repositioning	
Psychological support : sharing info, reinforce positives	
Share caretaking responsibilities with parents	

Postmaturity (old man looking)

Problems	
Aspiration	Meconium, hypoxia
Polycythemia	Increase number of RBC
Seizure activity	severe hypoxia
Cold stress	loss of subcutaneous fat
Hypoglycemia	use of glucose stores, glycogen
Nursing Care	
- may require prolonged monitoring	
- support well being due to wasting effect	
- Early detection of polycythemia & hyperbilirubinemia	
- Focus on prevention : due date	
- Attention to thermoregulation & feeding	
Common complications	
• 2-3 times higher morbidity than term infants	
• Hypoglycemia	used depleted glycogen stores
• Aspiration	of meconium in response to hypoxia
• Polycythemia	Increase RBC response to hypoxia
• Seizure activity	from severe hypoxia
•Cold stress	start to lose weight in the utero

Large for Gestational Age

Appearance

- • Possible fracture of the clavicles
- • Facial head bruising and palsy
- • Caput succedaneum (normal: disappear 12 018 mons)
- • Cephalhematoma

Complications

Large for Gestational Age (cont)

- • Birth trauma due to cephalopelvic disproportion
- • Increased ceasarian sections
- • Hypoglycemia , hyperbilirunemia
- • Polycythemia, hyperviscosity
- • irregular HR, cyanosis

Nursing Care

- - Monitor for hypoglycemia
- - Screening for polycythemia (cbc, h&h)
- - Careful assessment for injuries & address prenatal concerns about injuries like fractured clavicle
- - Monitor temp, and minimize heat loss
- - Initiate early feedings, touch and cuddling
- - Support parents and teach

Meconium Aspiration Syndrome

Symptoms

- • Bluish skin color of the infant
- • Difficult breathing (none or rapid)
- • Limpness in infant at birth

Treatment

- • ET tube placement and suctioning
- • Using a face mask with oxygen mixture
- • Antibiotic to treat infection
- • Radiant warmer to maintain body temp

Respiratory Distress Syndrome (copy)

Causes

Not enough of substance called surfactants that consists of phospholipids and protein. begins to be produced at 24-28 wks. by 35 wks most have develop adequate surfactant.

Symptoms

- • Difficulty of breathing (tachypnea, grunting)
- • Cyanosis (blue coloring)
- • Flaring of the nostrils

Respiratory Distress Syndrome (copy) (cont)

- Chest retractions (pulling in ribs & sternum)
- symptoms peak at 3rd day, diuresis dec. need of O2

Treatments

- Placing an ET tube, mechanical ventilation
- Supplemental oxygen
- Continuous positive airway pressure (CPAP)

Hypothermia

Methods of Heatloss

Evaporation	wet surface exposed to air
Conduction	Direct contact with cool objects
Convection	surrounding cool air. Drafts
Radiation	Transfer of heat to cooler objects

Manifestations

CC	cold skin on trunk & extremities. cyanosis
DD	decrease in temperature & activity
P	poor feeding in form of suckling
S	Shallow respirations

Nursing Care

Prevention	radiant warmer. careful not to burn
Provision	quick dry, head cap & dry warm blankets

Cold Stress

R	respiratory distress
I	increased oxygen need
D	decreased surfactant production
H	hypogylcemia *(<30 mg/dl)*

Hypothermia (cont)

M	metabolic acidocis

Small Gestation Age (<10%)

Causes

- may be born preterm, term, post term
- may have experienced (IUGR) or failed to grow
- Placental anomaly, poor nutrition
- Smoking, cocaine, teratogen exposure
- Severe DM, decreased blood flow to placenta

Common complications

Perinatal asyphaxia	deficient oxygenation
Hypothermia	Inadequate surfactant
Hypoglycemia	Use of glycogen stores
Meconium aspiration	Hypoxia | RDS
Still birth	loss from death

Nursing Care

- Maintain airway and temperature
- Monitor for signs of respiratory distress
- Monitor glucose level, or signs of hypoglycemia
- Minimize heat loss to prevent hypothermia
- Provide feeding, touch, support, teaching
- Evaluate Hct level : hypoxia & polycythemia
- Monitor signs of sepsis, infection, malformations
- Fluids and frequent feedings

Lab findings: low plasma levels and high levels of RBC makes blood thick and heart to pump harder. Increases the chance of thrombosis and prolonged cyanosis

Low birth weight

LBW	less than or equal to 2500g (5lbs 8 oz)
VLBW	less than or equal to 1500g (3lbs 5oz)
ELBW	less than or equal to 1000g (2lbs 3oz)

Prevention

- Early & regular prenatal care
- Seek medical check uo
- Quit smoking and other teratogenic factors
- Take multivitamin containing 400 micg of folic acid

Failure to Thrive

Symptoms

- height,weight, and head do not match growth charts
- Weight is lower than 3rd percentile (20% below ideal)
- growth may have slowed or stop
- Delayed or slow to develop physical, mental, social

Treatment

Nutritional	provide a well balanced diet
Supplements	talk to HCP first, correct deficiency

ABO | Rh Incompatibility

Symptoms

- Back pain, blood in urine
- Chills, fever, jaundice, impending doom

Treatment

- Antihistamines to treat allergic reactions
- Steroids to treat swelling and allergies
- Fluids given intravenously

By **Dani** (Dan_Niel)
cheatography.com/dan-niel/

Published 14th February, 2021.
Last updated 14th February, 2021.

ABO | Rh Incompatibility (cont)

- Medicines to raise blood pressure if drops too low
- Rh immune globulins (Rhlg) for rh incompatibility

Exams and tests

- Coombs' test to llok for cell destroying antibodies
- Bilitubin test shows high. CBC: damage to RBC
- Urine test shows presence of hemoglobin

SIDS (crib death)

Factors causing SIDS

Brain Ab.	portion that controls sleep & breathing doesn't work properly
LBW	baby's brain has not matured completely
infection	contributes to breathing problems
Sleeping	on side, on soft surface, with parents

Prevention

- Sleeping on the back
- Keep the crib as bare as possible. use firm mattress
- Don't overheat baby. blanket should be lightweight.

Baby should sleep alone. baby can be rolled over by parents

- Breast feed for six months lowers risk of SIDS.