

# N432 Newborn Worksheet

Name: Shelby Powell

**This assignment is due at 2359 CST Tuesday before you are assigned to the nursery.**

**Complete table (40 points) Include in-text citations in APA format. Attach Reference page.**

<b>Area</b>	<b>Normal Findings</b>	<b>Expected Variations</b>
<b>Skin</b>	Warm and pink with acrocyanosis, milia present on the bridge of the nose and chin, lanugo on the back, shoulders, and forehead, which decreases with the aging of the infant, peeling or cracking on infants >40weeks, slate gray patches, hemangiomas such as salmon colored patches, nevus flammeus, and strawberry hemangiomas indicate vascular abnormality development, or erythema toxicum (Durham et al., 2023).	After the first 10 minutes of life, central cyanosis is caused by reduced oxygen saturation and hypoxia, jaundice within the first 24 hours, pallor with anemia, hypothermia, shock, r sepsis, green or yellow vernix, persistent ecchymosis or petechiae occurs with thrombocytopenia, sepsis, or a congenital infection, thin/translucent skin, longer nails, and pilonidal dimple (Durham et al., 2023).
<b>Head</b>	Molding present, circumference measures between 32 and 36cm (Durham et al., 2023).	Bruising and lacerations can be caused by the fetal scalp electrode or vacuum extractor (Durham et al., 2023). Caput succedaneum or cephalohematoma can be found (Durham et al., 2023).
<b>Fontanel</b>	fontanel are open, soft, intact, and slightly depressed, anterior fontanel is diamond in shape, between 2.5-4cm, posterior fontanel is triangular in shape between 0.5 and 1cm (Durham et al., 2023).	Fontanel are firm and bulging when not crying can be indicative of increased intracranial pressure (Durham et al., 2023). Depressed fontanel can be caused by dehydration (Durham et al., 2023). Normal fontanel are open, soft, and slightly depressed (Durham et al., 2023).
<b>Face</b>	The infant's face should have eyes that are equal and symmetrical in placement, a flattened or bruised nose, pink, moist, and intact lips, gums, tongue, palate, and mucous membranes (Durham et al., 2023). Millia should be present on the chin and the bridge of their nose, and the pinna of each ear and the external canthus of the eye should be aligned	It is possible for the sclera to be blue in color as an indication of osteogenesis imperfecta (Durham et al., 2023). Having a flat nasal bridge and low-set ears can be associated with Down syndrome (Durham et al., 2023). An absent startle reflex can be an indication of hearing loss, and skin tags, dimpling, or lesions can be signs of kidney or other abnormalities (Durham et al., 2023).

	(Durham et al., 2023).	
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<b>Eyes</b>	Eyes are equal and symmetrical in placement and size, with pupils that are equally reactive to light (Durham et al., 2023). A neonate can follow objects within 12 inches of the field of vision, the sclera is white/blueish white, and the iris is blue-gray or brown (Durham et al., 2023).	A neonate with unequal pupil reactions can indicate neurological trauma (Durham et al., 2023). Blue sclera can indicate osteogenesis imperfecta, and an absent red-light reflex is an indication of cataracts (Durham et al., 2023). Due to the pressure of labor and birth, a subconjunctival hemorrhage (Durham et al., 2023).
<b>Nose</b>	It is normal for the infant's nose to be bruised or flattened because of the birthing process (Durham et al., 2023). The infant's nares should be patent with small amounts of mucus present (Durham et al., 2023).	The infant should not have large amounts of mucus, or nasal flaring (Durham et al., 2023). If the infant has a flat nasal bridge, it could be an indication of down syndrome (Durham et al., 2023).
<b>Mouth</b>	The infant should have pink, moist, and intact mucus membranes, lips, gums, tongue, and palate (Durham et al., 2023). The infant's lips may be dry after birth, and Epstein's pearls may be present (Durham et al., 2023).	Unusual findings may include cyanotic mucous, bluish mucus membranes, dry mucus membranes, natal teeth, cleft lip, cleft palate, or thin philtrum (Durham et al., 2023).
<b>Ears</b>	Normal infant ears should have a pinna that is well-formed and flexed without deformities (Durham et al., 2023). The top of the pinna should be aligned with the external canthus of the eye (Durham et al., 2023). The infant should respond to noises with positive startle signs (Durham et al., 2023).	If the infant doesn't have the startle reflex it is possible that they can have hearing loss (Durham et al., 2023). A common characteristic of down syndrome is low set ears (Durham et al., 2023). Any skin tags, lesions, or dimpling can be signs of another underlying health issue (Durham et al., 2023).
<b>Neck</b>	The infant's neck should have a positive tonic neck reflex and be short with skinfolds (Durham et al., 2023).	If the infant has a negative tonic neck reflex, there could be nerve damage (Durham et al., 2023). Webbing or large skin folds at the back of the neck can indicate genetic disorders (Durham et al., 2023).
<b>Chest</b>	The infant's chest should be	There are a couple of abnormalities,

	<p>symmetrical and barrel-shaped (Durham et al., 2023). An infant's breasts can be enlarged and produce clear or milky fluid discharge from the nipples that are related to the mother's hormones (Durham et al., 2023).</p>	<p>such as funnel chest and pigeon chest (Durham et al., 2023). A pigeon chest can cause an obstruction of respiration which can cause respiratory distress on the infant (Durham et al., 2023).</p>
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<b>Breath Sounds</b>	The first few hours after birth, there might be scattered crackles heard throughout the lungs due to retained fluid that will absorb through the lymphatic system; however, they should be clear and equal bilaterally (Durham et al., 2023).	Signs of respiratory distress include persistent crackles, wheezing, stridor, decreased breath sounds, or periods of apnea greater than 15-20 seconds (Durham et al., 2023). Meconium aspiration or a pneumothorax can be shown through decreased or absent breath sounds (Durham et al., 2023).
<b>Heart Sounds</b>	The infant should have a regular rhythm, brachial and femoral pulses should be present and equal, S1 and S2 should be present, and the maximum impulse should be found at the 3 <sup>rd</sup> or 4 <sup>th</sup> intercostal space (Durham et al., 2023). There are murmurs found in roughly 30% of neonates, which resolve within two days (Durham et al., 2023).	Abnormalities such as dextrocardia, or a displaced point of maximum impulse can be present (Durham et al., 2023). Persistent murmurs indicate a return to fetal circulation or congenital heart disease (Durham et al., 2023). Congenital heart disease may also be shown by the femoral pulses feel weaker than the brachial pulses (Durham et al., 2023).
<b>Abdomen</b>	The abdomen should be soft, round, symmetrical, and protuberant (Durham et al., 2023).	Hernias often resolve on their own within the first year of life, and an asymmetrical abdomen can indicate an abdominal mass (Durham et al., 2023).
<b>Bowel Sounds</b>	Present but hypoactive bowel sounds are normal for the first few days after birth; all meconium should be passed within 48 hours after birth (Durham et al., 2023).	If meconium stool hasn't passed, it's possible that there is a meconium ileus or a perforated anus (Durham et al., 2023).
<b>Umbilical Cord</b>	The umbilical cord should be opaque or be a blue/whiteish color with two arteries and a vein running through (Durham et al., 2023). It should be covered in Wharton's jelly (Durham et al., 2023). The skin surrounding the umbilical cord should be routinely checked for signs of infection (Durham et al., 2023). The cord will become darker	If there is only one artery and vein in the umbilical cord, it can be a sign of a malformation of the heart or kidney (Durham et al., 2023).

	within 24 hours and will detach from the body within 2 weeks post birth (Durham et al., 2023).	
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<b>Genitals</b>	<p>A female infant will have a labia majora and labia minora, which may have edema (Durham et al., 2023). A blood-tinged discharge may be related to the maternal hormones abrupt decrease with birth (Durham et al., 2023). White discharge is normal in female infants, their urine may be dark, with a rust-red colored crystals (Durham et al., 2023).</p> <p>In a male infant, at the tip of the penis, the urinary meatus should be present (Durham et al., 2023). They should have a large, pendulous, edematous scrotum with rugae present (Durham et al., 2023). The testes should both be palpable in the scrotum (Durham et al., 2023). The infant should have an uninterrupted urine stream within 24 hours post birth (Durham et al., 2023). It's normal for urine to be dark with rust-red crystals for the first few days (Durham et al., 2023).</p>	<p>A female infant may have a prominent clitoris, and small yet visible labia minora can be seen in preterm infants (Durham et al., 2023). The infant may have renal failure, polycystic disease, or possibly a urinary tract obstruction if there is no urination in 24 hours (Durham et al., 2023).</p> <p>In the male infant, the urethral opening can sometimes be found on the ventral surface or on the dorsal side of the penis (Durham et al., 2023). Testes that do not descend might not be palpable in the scrotum (Durham et al., 2023). The scrotum may be enlarged because of excess fluid, and no urination for 24 hours can indicate underlying issues (Durham et al., 2023).</p> <p>Ambiguous genitalia will require further genetic testing to determine the sex of the infant (Durham et al., 2023).</p>
<b>Anus</b>	<p>Within 24 hours post birth, the anus should be patent regarding stool passage (Durham et al., 2023).</p>	<p>There may be anal fistulas or fissures present (Durham et al., 2023). An imperforated anus will require immediate surgery (Durham et al., 2023).</p>
<b>Extremities</b>	<p>Infants should have 10 fingers and 10 toes, 5 phalanges on each hand and foot (Durham et al., 2023). Their arms and legs should be equal in strength and length, with a full range of motion in all extremities, including no clicking at the joint (Durham et al., 2023). Palmar grasp, plantar grasp, Babinski and stepping/dancing should all be present during assessment</p>	<p>There are a couple of different genetic disorders that can be found in the extremities, such as polydactyly, syndactyly, unequal gluteal folds, and a positive Barlow or Ortolani maneuver (Durham et al., 2023). Decreased muscle tone or range of motion can be a sign of birth injury, neurological disorder, or prematurity (Durham et al., 2023). The birthing process can be traumatic and can cause a broken</p>

	(Durham et al., 2023).	clavicle in vaginal birth infants with large shoulders (Durham et al., 2023). Signs of Down syndrome include simian creases, short fingers, and a wide space between the big and second toes (Durham et al., 2023). If the palmar grasp is weak or absent, it can indicate a possible central nervous system defect or a nerve-muscle injury (Durham et al., 2023). A weak or absent plantar grasp can indicate a possible spinal cord injury (Durham et al., 2023). A neurological defect could be indicated by a weak or absent Babinski test (Durham et al., 2023). Decreased response of dancing/stepping can be a sign of hypotonia (Durham et al., 2023).
<b>Spine</b>	The infant should have a C-shaped spine without openings found in the vertebrae (Durham et al., 2023). There should also not be any dimpling or sinuses observed (Durham et al., 2023).	If a vertebral opening is found, it can be an indication of spina bifida, while dimpling or sinuses may indicate a pilonidal cyst or a neurological disorder (Durham et al., 2023).

**For the following questions and tables, include in-text citations in APA format. Attach Reference page.**

1. What safety and security measures are in place for newborns? **(5 points)**

Newborns and mothers have a matching bracelet with the mother's name, sex of the baby, and the doctor's name. The postpartum units are badge or code entry only, and the newborns have a hugs alarm ankle bracelet.

2. What are normal ranges for an infant's heart rate and respiratory rate? **(2 points)**

The infant's normal ranges for heart rate are between 110 and 160 bpm (Durham et al., 2023). The infant's normal range for respiratory rate is between 30 and 60 unlabored breaths per minute (Durham et al., 2023).

3. What is the normal range and method for acquiring an infant's temperature? Why is this? **(2 points)**

The most preferred area is the axillary, with a range of 99.7-99 degrees F (Durham et al., 2023).

**Complete Table (10 points)**

<b>Medication</b>	<b>Dosage</b>	<b>Administration Site</b>	<b>Possible side effects</b>	<b>Why is this administered?</b>
<b>Vitamin K</b>	0.5-1mg (Durham et al., 2023).	Intramuscular (Durham et al., 2023).	Erythema, pain, and swelling at the injection site (Durham et al., 2023).	To prevent vitamin K deficiency bleeding (Durham et al., 2023).
<b>Erythromycin</b>	1 cm bead of ointment (Durham et al., 2023).	Lower eye lid of each eye (Durham et al., 2023).	Edema and inflammation of the eyelids (Durham et al., 2023).	Prophalaxis treatment for gonococcal or chlamydial eye infections (Durham et al., 2023).
<b>Hepatitis B</b>	0.5 mL (U.S. Food and Drug Administration, 2023).	Inject into the vastus lateralis (Durham et al., 2023).	Irritability, fatigue, diminished appetite, and rhinitis (U.S. Food and Drug Administration , 2023).	A Hep B preventative (Durham et al., 2023).

**Complete Table (20 points)**

<b>Name of Test</b>	<b>Why is this test ordered?</b>
<b>Blood Glucose</b>	To test for hypoglycemia in neonates (Durham et al., 2023).
<b>Blood type and Rh Factor</b>	These are ordered to determine if a coombs test is needed and if the mother will need a RhGAM later on in her pregnancy (Durham et al., 2023).
<b>Coombs Test</b>	This is an antiglobulin test ordered to identify isoimmunization (Durham et al., 2023). Patients the are Rh negative need to be rescreened in the second trimester and be given RhoGAM between 26-28 weeks and again later if the infant is Rh positive (Durham et al., 2023).
<b>Bilirubin levels</b>	This test is performed to detect liver function (Durham et al., 2023).
<b>Newborn Screen</b>	Newborn screens are completed to identify the health status and assess for disorders, defects, or other issues

	(Durham et al., 2023). Screening is also good for early detection and treatment for infants (Durham et al., 2023).
<b>Hearing Screen</b>	This test is ordered for early detection of hearing loss (Durham et al., 2023). The test is done while the newborn is calm or sleeping in a quiet room. If the test is failed, they must retest in 1 month (Durham et al., 2023).
<b>Newborn Cardiac Screen</b>	After the infant is 24h old, a critical congenital heart defect screen is done (Durham et al., 2023). The nurse will take a pulse oximetry reading on the right hand and either foot to see if they are getting enough oxygen of 95% or higher (Durham et al., 2023).

1. Identify 3 educational topics that should be discussed with caregivers of the infant. **(6 points)**
  - a. Cold stress signs and symptoms include axillary temperature below 97.7°F, cool skin, restlessness, crying, pale skin, acrocyanosis, tachypnea, grunting, hypoglycemia, hypotonia, lethargy, jitters, weak suckling, weight loss, and hypoxia (Durham et al., 2023).
  - b. Importance of vitamin K injection to the neonate after birth to prevent brain bleed (Durham et al., 2023).
  - c. Minimum wet diapers and stools for how old they are. The first day, the neonate should have a minimum of 1-2 wet and 1 stool (Durham et al., 2023). Day 2 should be 2-3 wet, 2 stool (Durham et al., 2023). Day 3 should have a minimum of 3-4 wet, 2-4 stool (Durham et al., 2023). Days 4 -5 should have 4-5 wet and 3-4 stools (Durham et al., 2023). Day 6 should have 6-8 wet and 3 or more stools (Durham et al., 2023). Day 7 should have 8 or more wet and 3 or more stools (Durham et al., 2023).
  
2. Identify 2 potential nursing diagnoses for a newborn patient. **(10 points)**
  - a. At risk for altered body temperature, hypothermia, related to decreased amounts of subcutaneous fat or large body surface (Durham et al., 2023).
  - b. At risk for impaired gas exchange related to transitioning from neonatal circulation, cold stress, or excessive mucus production (Durham et al., 2023).

**Attach Reference page:**

Durham, R. F., Chapman, L. & Miller, C. (2023). *Davis Advantage for Maternal-Newborn Nursing:*

*Critical Components of Nursing Care* (4th ed., p. 481-573). F. A. Davis Company.

U.S. Food and Drug Administration. (2023). *Recombivax HB (hepatitis B vaccine, recombinant)*

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<https://www.fda.gov/files/vaccines%2C%20blood%20&%20biologics/published/package-insert-recombivax-hb.pdf>