Alberta Health Services

Alberta Perinatal Health Program

Recognizing Illness in the Term Newborn

All newborns are at risk for illness, especially infections during the first few weeks of life. Symptoms of illness can be subtle and atypical. A newborn's condition can deteriorate rapidly. Frequent and repeated assessmentof breathing, heart rate, color, temperature, and activity are essential to recognizing illness and taking action. Parents also need to know the warnings signs of illness and that prompt treatment may be required.

	Wellbeing	Warning Signs of Illness	Immediate Action
Respiratory	• 30 – 60 breaths per minute	**Respiratory Distress** • Labored breathing, nasal flaring, chest retraction, gasping, grunting, periods of apnea, cough • > 60 breaths per minute • Cyanosis requiring oxygen • Unable to maintain Sp02 at 92%*	**Signs of newborn illness can be life threatening and require immediate action** **Resuscitate immediately if:** – **ineffective breathing or apnea** – **heart rate < 100 bpm** – **central cyanosis** • **Recognize** – symptoms • **Communicate** – Call for help! • Act **Provide Warmth to minimize stress** **A – Open Airway (Reposition) Clear (suction)** **B – Stimulate breathing PPV/ CPAP (if needed) Titrate Oxygen to Sp02** **C – Provide Compressions (if needed) Consider vascular Access Monitor Vital Signs (TPR)** **D – Monitor Glucose** **E – Examine infant (look for Obvious signs of illness/injury)** • **Consult or transport as required** • **Consider antibiotics early** • **Provide ongoing assessment andsupport, observational care** • **Document treatment and response** • **Arrange follow-up**
Cardiovascular/ Color	• 100 - 160 beats per minute • Regular rhythm • Well perfused, pink • Warm peripheries • Brisk capillary refill	**Shock or Cyanosis** • Pale, mottled, grey skin • Cyanotic extremities • Central cyanosis (mucous membranes) • Weak or rapid pulse, BP MAP < gestational age • Cold extremities or prolonged capillary refill (>3 seconds) • Failed CCHD screen	
Neurological	• Normal tone, flexed • Vigorous cry • Sleep/wake cycles • Responds to handling with eye opening and interaction	**Change in Activity** • Floppy or increased tone (hypotonic or hypertonic) • Irritability or lethargy with abnormal or diminished response to handling • Weak or high-pitched cry, cries more than usual • Bulging fontanelles • Tremors, jitteriness, or seizures • Poor suck and swallow • Skin changes suggestive of HSV or other infections	
Glucose	• ≥2.6 mmol/L < 72hrs of age • 3.3 – 5.0 mmol/L ≥ 72 hrs • Feeds well	**Hypoglycemia** • Glucose levels outside of normal range • Unwell, not feeding or feeding poorly	
Thermo-regulation	• Axillary temperature 36.5 °C to 37.5 °C • Skin-to-skin should be used to support thermal management	**Temperature Instability** Despite Nursing interventions: • Temperature remains <36.5°C to >37.5°C *Temperature assessment must be considered in the full clinical context (e.g., warm environment, multiple layers)*	
Feeding	• Ability to suck • Coordinated suck and swallowing • Wakes for feeds • Satisfied with feeding • Return to birthweight by 10-14 days of age	**Feeding Concerns** • Vomiting or inability to swallow • Ineffective feeding • Weight loss >10%	
GI/GU	• Passed meconium within 24 hours of birth • Moist mucous membranes • Normal skin turgor (elastic and hydrated) • Voided within 24 hours of birth • Urine is clear, pale yellow	**Suspected GI Pathology** • No meconium by 24 hours of age • Bloody stools, diarrhea • Distended abdomen • Vomiting, Bilious vomiting • No voids within 24 hours of birth • Number of wet diapers per day has decreased • Urine is dark yellow • Uric crystals present past day 3	
Bilirubin	• No clinical evidence of jaundice • TSB or TcB levels indicate routine care is appropriate	**Hyperbilirubinemia** • Jaundice within 24 hours of birth • Reappearance of jaundice • Elevated TSB or TcB level for age	
Umbilical Cord	• No redness or discharge	**Possible Omphalitis** • Redness or swelling extending intosurrounding tissue • Discharge or foul odor from cord	

Risk Factors – Include but are not limited to:

Mother	Delivery	Baby
• Infectious issues: Group B Streptococcus carrier, PROM, fever, chorioamnionitis, HIV, Herpes, Syphilis, Hepatitis B, UTI • SSRI's • Viral infections • Alcohol, drugs, or tobacco use • Chronic conditions • RH isoimmunization • Placental Compromise (e.g., abruption, antepartum and intrapartum vaginal bleeding)	• Shoulder Dystocia • Cord Compression • Operative or assisted vaginal delivery • Analgesia given during labor • Prolonged rupture of membranes (PROM) > 18 hours • Foul smelling amniotic fluid • Meconium	• Low Apgar score < 4 at 1 min, < 7 at 5 min • Low cord pH (< 7.00), birth trauma • Infants who required resuscitation • Preterm babies < 37weeks • Post-term ≥ 42 weeks • SGA or low birth weight < 2500 g • LGA or macrosomia > 4200 g • Hypoglycemia < 2.6 mmol/L • Axillary temperature < 36.5 °C or > 37.5 °C • Isoimmune hemolytic disease (DAT +)

Infants may become ill in the absence of risk factors

***ACoRN 2nd ed states 90-95%**

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