Danger Signs in Newborn
Sick newborn

Early detection, prompt treatment and referral (if required) are necessary to prevent high mortality.
Problems in early diagnosis of sick newborn

- Non-specific signs
- Difficulties in preterm and LBW babies
Lethargy and poor sucking

- In a term baby who was feeding earlier → indicates neonatal illness (as perceived by mother)
- In a preterm baby → needs careful assessment because it may be due to cold stress or immaturity
Capillary refill time (CRT)

- Indicates tissue perfusion
- Normal CRT < 3 seconds
- Prolonged CRT ≥ 3 seconds *
  - Use 10ml/kg normal saline bolus

* Hypotension, hypothermia, acidosis
Capillary refill time (CRT)
Respiratory problems

- RR > 60 / min*
- Retractions
- Grunt
- Central cyanosis
- Apnea

*Rate should be counted in a quiet state and not immediately after feed
Body temperature in newborn infant (°C)

- Normal range: 37.5°
- Cold stress: 36.5°
- Moderate hypothermia: 36.0°
- Severe hypothermia: 32.0°

- Cause for concern
- Danger, warm baby
- Outlook grave, skilled care urgently needed
Failure to pass meconium and urine

**Failure to pass meconium**

*Majority pass within 24 hrs*
- Delayed passage
- May have passed in –utero
- Lubricated per-rectal thermometer may be therapeutic
- Suspect obstruction

**Failure to pass urine**

*Majority pass within 48 hrs*
- Delayed passage
- Exclude obstructive uropathy or renal agenesis
Causes of vomiting*

- Ingestion of meconium stained amniotic fluid
- Systemic illness
- Congestive cardiac failure
- Raised ICP – IVH, asphyxia
- Metabolic disorders (CAH, galactosemia)

*Persistent, projectile or bile stained - r / o intestinal obstruction
Causes of diarrhea

- Infective diarrhea* (often non breast fed baby)
- Maternal ingestion of drugs (ampicillin, laxatives)
- Metabolic disorders
- Thyrotoxicosis
- Maternal drug addiction

*Infective diarrhea needs treatment with systemic antibiotics
Cyanosis

Peripheral
- Normal at birth
- Seen in extremities due to cold

Central
- Always needs appropriate referral
- Seen on lips and mucosa
- Indicates cardiac or pulmonary disease
Peripheral cyanosis
Central cyanosis
Yellow Palms & Soles
Yellow staining of soles
Tracheo-esophageal fistula

- Excessive drooling; choking; cyanosis during feeds; respiratory distress
- Failure to pass red rubber catheter beyond 8 to 10 cm from mouth
Tracheo-esophageal fistula
Suspect cardiac disease

- Cyanosis
- Tachycardia
- Murmur
- Hepatomegaly
- Shock
- Cardiomegaly
Abnormal weight loss pattern

- > 10 percent of birth weight in term
- > 15 percent in preterm
- > 5 percent acute weight loss
Danger signs: Summary

- Lethargy
- Hypothermia
- Respiratory distress
- Cyanosis
- Convulsion
- Abd. distension
- Bleeding
- Yellow palms/soles
- Excessive wt. loss
- Vomiting
- Diarrhea