Table 1 Available scoring systems with relevant reference values for the neonatal population

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Development | Gestational age | Temperature (°C) | Cap. refill time | Heart rate (bpm) | Respiratory rate (per minute) | Work of breathing | Grunting | SpO2/Oxygen requirement/Colour | Level of consciousness | Blood glucose (mmol) | Staff concern |
| Holme (Holme et al., 2013) | The Neonatal Trigger Score | Local  expert consensus based on Neonatal Life Support 2010 guidelines and the National Institute for Clinical  Excellence Postnatal care guideline | >35 weeks of gestation | 36.5-37.4°C | N/A | 100-159 | 31-51 | Y/N | N/A | N/A | Alert/sleeping,  Irritable/lethargic/jittery, unresponsive | 2.0-5.9 | N/A |
| Roland (Roland, 2010) | The  Newborn Early Warning system | Retrospective chart review | Term infants >2.5 kg | 36.25-37.5°C | N/A | 90-150 | 30-60 | Apnoea | N/A | Pink (SpO2>94%), SpO290-94%, or dusky/blue (SpO2<90%) | Active/wakes to feed, jittery/irritable, floppy/difficult to arouse, seizures | N/A | N/A |
| Ahmed (Ahmed et al., 2016) | The Burton Newborn Observation Track and Trigger Chart | A prospective, observational study of 24+93 neonates | Not specified | 36.0-37.5°C | N/A | 90-160 | 30-60 | Retractions | Yes | SpO2 >94%  SpO2 90-94%  SpO2 <90% | Alert  Jittery/lethargic  Floppy/not feeding | >2.6 | Yes |
| British Association of Perinatal Medicine (2015) | The Newborn Early Warning Trigger and Track | A working party convened by the British Association of Perinatal Medicine, UK | Not specified | 36.5-37.5°C | N/A | 100-160 | 40-60 | Grunting | Yes | SpO2.>95%  SpO2 91-94%  SpO2 <90% | Active/feeding well  Jittery/irritable/poor feeding  Floppy/poor feeding | N/A | N/A |
| McLellan (McLellan et al., 2014) | The Cardiac Children’s Hospital Early Warning Score | A multidisciplinary panel assessed risk factors that were unique to car-  diovascular children and incorporated these  into a modified paediatric early warning scoring tool | N/A | N/A | ≤ 2 sec - >5 sec | ≥10, 15 or 25% normal for age | ≥10, 15 or 25% normal for age | Mild, moderate, severely increased work of breathing | Yes | >40%, 40-60% or >60% oxygen via mask  Appropriate skin tone for patient/pale/grey/  grey and mottled | Playing/sleeping, sleepy, somnolent when not disturbed, irritable, difficult to console. Increase in baseline seizure activity. Lethargic, confused, floppy. Reduced response to pain, prolonged or frequent seizures, pupils asymmetric or sluggish | N/A | N/A |
| Singh (Singh et al., 2014) | Dayanand Medical College and Hospital, Ludhiana,  India | A prospective, observational study of 344 neonates at admission | Low birth weight | Moderate hypo/hypothermia | <3 sec | 100-160 | 30-60 | Chest recessions | Respiratory distress | SpO2<90% | Decreased sensorium level, reduced or no activity | N/A | N/A |
| Adapted from (Downes et al., 1970) | ACoRN respiratory score | Adapted from Downes | >34 weeks, 30-34 weeks or <30 weeks | N/A | N/A | N/A | 40-60 | No retractions, mild/moderate, severe | None, with stimulation, continuous at rest | No extra oxygen requirements, ≤50% or >50% | N/A | N/A | N/A |