# N-PASS:
# Neonatal Pain, Agitation, & Sedation Scale

| Assessment Criteria | Sedation | | Sedation/Pain | Pain / Agitation | |
|---|---|---|---|---|---|
| | -2 | -1 | 0/0 | 1 | 2 |
| Crying Irritability | No cry with painful stimuli | Moans or cries minimally with painful stimuli | No sedation/ No pain signs | Irritable or crying at intervals<br>Consolable | High-pitched or silent-continuous cry<br>Inconsolable |
| Behavior State | No arousal to any stimuli<br>No spontaneous movement | Arouses minimally to stimuli<br>Little spontaneous movement | No sedation/ No pain signs | Restless, squirming<br>Awakens frequently | Arching, kicking<br>Constantly awake or<br>Arouses minimally / no movement (not sedated) |
| Facial Expression | Mouth is lax<br>No expression | Minimal expression with stimuli | No sedation/ No pain signs | Any pain expression intermittent | Any pain expression continual |
| Extremities Tone | No grasp reflex<br>Flaccid tone | Weak grasp reflex<br>↓ muscle tone | No sedation/ No pain signs | Intermittent clenched toes, fists or finger splay<br>Body is not tense | Continual clenched toes, fists, or finger splay<br>Body is tense |
| Vital Signs HR, RR, BP, $SaO_2$ | No variability with stimuli<br>Hypoventilation or apnea | < 10% variability from baseline with stimuli | No sedation/ No pain signs | ↑ 10-20% from baseline<br>$SaO_2$ 76-85% with stimulation – quick ↑ | ↑ > 20% from baseline<br>$SaO_2$ ≤ 75% with stimulation – slow ↑<br>Out of sync/fighting vent |


*(Rev. 2/10/09)* Pat Hummel, MA, APN, NNP, PNP


**Premature Pain Assessment** + 1 if <30 weeks gestation / corrected age

**Assessment of Sedation**

- Sedation is scored in addition to pain for each behavioral and physiological criteria to assess the infant's response to stimuli
- Sedation does not need to be assessed/scored with every pain assessment/score
- Sedation is scored from 0 → -2 for each behavioral and physiological criteria, then summed and noted as a negative score (0 → -10)
  - A score of 0 is given if the infant has no signs of sedation, does not under-react
- Desired levels of sedation vary according to the situation
  - "Deep sedation" → goal score of -10 to -5
  - "Light sedation" → goal score of -5 to -2
  - Deep sedation is not recommended unless an infant is receiving ventilatory support, related to the high potential for hypoventilation and apnea
- A negative score without the administration of opioids/ sedatives may indicate:
  - The premature infant's response to prolonged or persistent pain/stress
  - Neurologic depression, sepsis, or other pathology

**Assessment of Pain/Agitation**

- Pain assessment is the fifth vital sign – assessment for pain should be included in every vital sign assessment
- Pain is scored from 0 → +2 for each behavioral and physiological criteria, then summed
  - Points are added to the premature infant's pain score based on the gestational age to compensate for the limited ability to behaviorally communicate pain
  - Total pain score is documented as a positive number (0 → +11)
- Treatment/interventions are suggested for scores > 3
  - Interventions for known pain/painful stimuli are indicated before the score reaches 3
- The goal of pain treatment/intervention is a score ≤ 3
- More frequent pain assessment indications
  - Indwelling tubes or lines which may cause pain, especially with movement (e.g. chest tubes) → at least every 2-4 hours
  - Receiving analgesics and/or sedatives → at least every 2-4 hours
  - 30-60 minutes after an analgesic is given for pain behaviors to assess response to medication
  - Post-operative → at least every 2 hours for 24-48 hours, then every 4 hours until off medications

**Pavulon/Paralysis**

- It is impossible to behaviorally evaluate a paralyzed infant for pain
- Increases in heart rate and blood pressure at rest or with stimulation may be the only indicator of a need for more analgesia
- Analgesics should be administered continuously by drip or around-the-clock dosing
  - Higher, more frequent doses may be required if the infant is post-op, has a chest tube, or other pathology (such as NEC) that would normally cause pain
  - Opioid doses should be increased by 10% every 3-5 days as tolerance will occur without symptoms of inadequate pain relief

# Scoring Criteria

## Crying / Irritability

**-2** → No response to painful stimuli
- No cry with needle sticks
- No reaction to ETT or nares suctioning
- No response to care giving

**-1** → Moans, sighs, or cries (audible or silent) minimally to painful stimuli, e.g. needle sticks, ETT or nares suctioning, care giving

**0** → No sedation signs or No pain/agitation signs

**+1** → Infant is irritable/crying at intervals – but can be consoled
- If intubated – intermittent silent cry

**+2** → Any of the following
- Cry is high-pitched
- Infant cries inconsolably
- If intubated – silent continuous cry

## Behavior / State

**-2** → Does not arouse or react to any stimuli:
- Eyes continually shut or open
- No spontaneous movement

**-1** → Little spontaneous movement, arouses briefly and/or minimally to any stimuli
- Opens eyes briefly
- Reacts to suctioning
- Withdraws to pain

**0** → No sedation signs or No pain/agitation signs

**+1** → Any of the following
- Restless, squirming
- Awakens frequently/easily with minimal or no stimuli

**+2** → Any of the following
- Kicking
- Arching
- Constantly awake
- No movement or minimal arousal with stimulation (not sedated, inappropriate for gestational age or clinical situation)

## Facial Expression

**-2** → Any of the following
- Mouth is lax
- Drooling
- No facial expression at rest or with stimuli

**-1** → Minimal facial expression with stimuli

**0** → No sedation signs or No pain/agitation signs

**+1** → Any pain face expression observed intermittently

**+2** → Any pain face expression is continual

## Extremities / Tone

**-2** → Any of the following
- No palmar or planter grasp can be elicited
- Flaccid tone

**-1** → Any of the following
- Weak palmar or planter grasp can be elicited
- Decreased tone

**0** → No sedation signs or No pain/agitation signs

**+1** → Intermittent (<30 seconds duration) observation of toes and/or hands as clenched or fingers splayed
- Body is *not* tense

**+2** → Any of the following
- Frequent (≥30 seconds duration) observation of toes and/or hands as clenched, or fingers splayed
- Body is tense/stiff

## Vital Signs: HR, BP, RR, & $O_2$ Saturations

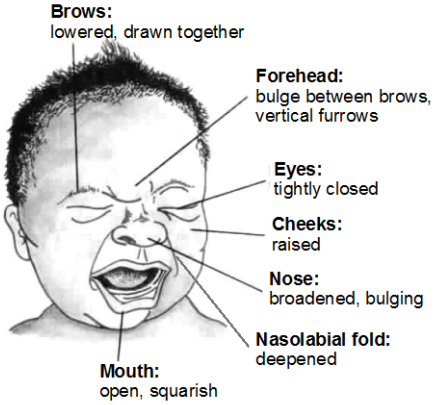
**-2** → Any of the following
- No variability in vital signs with stimuli
- Hypoventilation
- Apnea
- Ventilated infant – no spontaneous respiratory effort

**-1** → Vital signs show little variability with stimuli – less than 10% from baseline

**0** → No sedation signs or No pain/agitation signs

**+1** → Any of the following
- HR, RR, and/or BP are 10-20% above baseline
- With care/stimuli infant desaturates minimally to moderately ($SaO_2$ 76-85%) and recovers quickly (within 2 minutes)

**+2** → Any of the following
- HR, RR, and/or BP are > 20% above baseline
- With care/stimuli infant desaturates severely ($SaO_2$ < 75%) and recovers slowly (> 2 minutes)
- Out of sync/fighting ventilator




**Facial expression of physical distress and pain in the infant**



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