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**Coding Tips for CRIES**

**Crying**
The characteristic cry of pain is high-pitched.
- If there is no crying or it is not high-pitched ........................................ score 0
- If crying is high-pitched but the baby is easily consoled ............................ score 1
- If crying is high-pitched and the baby is inconsolable .......................... score 2

**Requires O₂ for oxygen saturation > 95%**
(Consider other causes of changes in oxygenation: atelectasis, pneumothorax, oversedation, etc.)
- Look for changes in oxygenation. Babies experiencing pain manifest decreases in oxygenation as measured by TCO₂ or oxygen saturation.
  - If no oxygen is required ................................................................. score 0
  - If < 30% O₂ is required ................................................................. score 1
  - If > 30% O₂ is required ................................................................. score 2

**Increased vital signs**
Note: Take blood pressure last, as this may wake the baby, making other assessments difficult.
- Use baseline preoperative parameters from a period free of stress.
  - Multiply baseline HR × 0.2, then add this total to the baseline value to determine whether the HR is 20% faster.
  - Do likewise for BP, using the mean value.
  - If HR and BP are both either unchanged or less than at baseline .................. score 0
  - If either HR or BP is increased less than 20% of baseline ...................... score 1
  - If either one is increased more than 20% from baseline ...................... score 2

**Expression**
The facial expression most often associated with pain is a grimace characterized by a lowered brow, the eyes squeezed shut, a deepening of the nasolabial furrow, and open lips and mouth.
- If no grimace is present ................................................................. score 0
- If grimace alone is present ............................................................. score 1
- If grimace and a vocalization without crying (grunt) are present .............. score 2

**Sleeplessness**
This parameter is scored according to the infant’s state during the preceding hour.
- If the baby has been continuously asleep ........................................ score 0
- If the baby has awakened at frequent intervals .................................... score 1
- If the baby has been awake continuously ........................................ score 2

\( HR = \text{heart rate}; \ BP = \text{blood pressure}; \ ↑ = \text{increase}; \ TCO₂ = \text{transcutaneous CO}_2 \)

From Krechel, S. W., & Bildner, J. (1995). CRIES: A new neonatal postoperative pain measurement score. Initial testing of validity and reliability. Pediatric Anesthesia, 5(1), 53–61. This neonatal pain assessment tool was developed at the University of Missouri–Columbia. Copyright 1995 S. W. Krechel and Jo Bildner. Adapted with permission.