Most babies will require a wean similar to the following with no dose increase of morphine:

- **Morphine + Phenobarbital**
- **Morphine + Clonidine** (if history of maternal OPIATE abuse)

**Weaning Pharmacologic Treatment**

- Morphine dose when withdrawal is considered controlled defined as the "stabilizing dose"
- Standard wean is 24 hours between medication weans; can accelerate to every 8 hours in infants exhibiting minimal symptoms of withdrawal
- Do not change morphine dosing interval during wean. (Maintain at q4 hour interval)
- After discontinuing morphine, continue to perform withdrawal assessments until discharge
  - If clinical symptoms of withdrawal evident on assessment, consider a "rescue dose" of morphine.
    - The dose given should be equal to the most recently discontinued dose.
    - If infant needs several "rescue doses", consider resuming prior morphine schedule

**Morphine Only**

- Once withdrawal assessments normal, standard wean recommends decreasing morphine dose by 10% of the stabilizing dose
- Discontinue morphine when infant has tolerated a dose of 0.12-0.16 mg/kg/day (0.02 mg/kg/dose) for 24 hours
- If provider team deems appropriate, may trial intermittent morphine dose of 0.03 mg/kg Q4 hours PRN
- Most babies will require a wean similar to the following:
  - If morphine doses are increased higher than beginning 0.03 mg/kg PO dose, the new higher dose will be called the "stabilizing dose"
  - Subsequent dosing will be completed by weaning 10% of the "stabilizing dose"
- If a baby has difficulty and requires a higher morphine "stabilizing dose" the wean may resemble as follows:
  - If stable x 24 hours, discontinue morphine

**Morphine + Clonidine (if history of maternal OPIATE abuse)**

- Consider adjuvant therapy if infant is requiring dose increases of morphine
- Start Clonidine 1 mcg/kg/dose PO q6h
- When NAS scores are stable, decrease morphine dose by 10% of the stabilizing dose once each day.
- When morphine has reached 0.05 mg/kg/dose, maintain dose and wean Clonidine as follows:
  - If NAS scores remain stable, resume decreasing morphine dose 10% daily
  - Discontinue morphine when infant has tolerated a dose of 0.12-0.16 mg/kg/day (0.02 mg/kg/dose) for 24 hours
  - *Could alternatively maintain clonidine dosing and wean off of morphine first, depending on social and discharge situation

**Morphine + Phenobarbital (if history of maternal POLYSUBSTANCE abuse)**

- Start Phenobarbital 16 mg/kg loading dose PO then begin 1-4 mg/kg PO q12h
- When assessments are stable, decrease morphine dose by 10% of the stabilizing dose once each day.
- Allow 24 hours between morphine weans
- When morphine has reached 0.3 mg/kg/day, maintain dose and discontinue Phenobarbital
- Observe 24 hours
- If assessments remain stable, resume decreasing morphine dose 10% daily
- Discontinue morphine when infant has tolerated a dose of 0.12-0.16 mg/kg/day (0.02 mg/kg/dose) for 24 hours

Most babies will require a wean similar to the following with no dose increases:
- 0.03 mg/kg PO q4h ("stabilizing dose")
- 0.027 mg/kg PO q4h (a decrease by 10% of "stabilizing dose")
- 0.024 mg/kg PO q4h (a decrease by 20% of "stabilizing dose")
- 0.021 mg/kg PO q4h (a decrease by 30% of "stabilizing dose")
- 0.018 mg/kg PO q4h (a decrease by 40% of "stabilizing dose" in order to wean below 0.02 mg/kg/dose)
  - If stable x 24-48 hours can discontinue morphine

One dose increase before "stabilizing dose":
- 0.03 mg/kg PO q4h
- 0.033 mg/kg PO q4h (an increase by 10% of starting dose)("stabilizing dose")
- 0.0297 mg/kg PO q4h (a decrease by 10% of "stabilizing dose")
- 0.0264 mg/kg PO q4h (a decrease by 20% of "stabilizing dose")
- 0.0231 mg/kg PO q4h (a decrease by 30% of "stabilizing dose")
- 0.0198 mg/kg PO q4h (a decrease by 40% of "stabilizing dose")
- 0.01605 mg/kg PO q4h (a decrease by 50% of "stabilizing dose")
- 0.0132 mg/kg PO q4h (a decrease by 50% of "stabilizing dose" in order to wean below 0.02 mg/kg/dose)
  - If stable x 24-48 hours can discontinue morphine

Two dose increases before "stabilizing dose":
- 0.03 mg/kg PO q4h
- 0.033 mg/kg PO q4h (an increase by 10% of starting dose)
- 0.036 mg/kg PO q4h (an increase by 20% of starting dose)("stabilizing dose")
- 0.0324 mg/kg PO q4h (a decrease by 10% of "stabilizing dose")
- 0.0288 mg/kg PO q4h (a decrease by 20% of "stabilizing dose")
- 0.0252 mg/kg PO q4h (a decrease by 30% of "stabilizing dose")
- 0.0216 mg/kg PO q4h (a decrease by 40% of "stabilizing dose")
- 0.018 mg/kg PO q4h (a decrease by 50% of "stabilizing dose" in order to wean below 0.02 mg/kg/dose)
  - If stable x 24-48 hours can discontinue morphine

Three dose increases before "stabilizing dose":
- 0.03 mg/kg PO q4h
- 0.033 mg/kg PO q4h (an increase by 10% of starting dose)
- 0.036 mg/kg PO q4h (an increase by 20% of starting dose)
- 0.039 mg/kg PO q4h (an increase by 30% of starting dose)("stabilizing dose")
- 0.0351 mg/kg PO q4h (a decrease by 10% of "stabilizing dose")
- 0.0312 mg/kg PO q4h (a decrease by 20% of "stabilizing dose")
- 0.0273 mg/kg PO q4h (a decrease by 30% of "stabilizing dose")
- 0.0234 mg/kg PO q4h (a decrease by 40% of "stabilizing dose")
- 0.0195 mg/kg PO q4h (a decrease by 50% of "stabilizing dose" in order to wean below 0.02 mg/kg/dose)
  - If stable x 24-48 hours can discontinue morphine

Four dose increases before "stabilizing dose":
- 0.03 mg/kg PO q4h
- 0.033 mg/kg PO q4h (an increase by 10% of starting dose)
- 0.036 mg/kg PO q4h (an increase by 20% of starting dose)
- 0.039 mg/kg PO q4h (an increase by 30% of starting dose)
- 0.042 mg/kg PO q4h (an increase by 40% of starting dose)("stabilizing dose")
- 0.0378 mg/kg PO q4h (a decrease by 10% of "stabilizing dose")
- 0.0336 mg/kg PO q4h (a decrease by 20% of "stabilizing dose")
- 0.0294 mg/kg PO q4h (a decrease by 30% of "stabilizing dose")
- 0.0252 mg/kg PO q4h (a decrease by 40% of "stabilizing dose")
- 0.021 mg/kg PO q4h (a decrease by 50% of "stabilizing dose")
- 0.0168 mg/kg PO q4h (a decrease by 60% of "stabilizing dose" in order to wean below 0.02 mg/kg/dose)
  - If stable x 24-48 hours can discontinue morphine

48 hours can discontinue morphine

- decrease by 40% of starting dose)("stabilizing dose")
- decrease by 30% of starting dose)
- decrease by 20% of starting dose)
- decrease by 10% of starting dose)
- decrease by 60% of starting dose"