



## What is STABLE?

Based on a mnemonic to optimize learning, retention and recall of information, S.T.A.B.L.E. stands for the six assessment and care modules in the program: **S**ugar, **T**emperature, **A**irway, **B**lood pressure, **L**ab work, and **E**motional support. A seventh module, Quality Improvement, stresses communication and teamwork as well as the professional responsibility of evaluating care provided to sick infants, with the ultimate goal of improving future care.

## Course options:

- 1) One-day Lecture Style Course (*Recommended for those with NICU experience*)
- 2) Two-day Lecture + Simulation/Hands-on Course (*Recommended for those working currently working in a level-one*)

## What will I learn?

### Sugar & Safe Care

1. Issues of patient safety and error reduction in the delivery of healthcare to infants.
2. Infants at increased risk for developing hypoglycemia, including preterm and small for gestational age infants, infants of diabetic mothers, and sick, stressed infants.
3. The impact of late-preterm birth on increased morbidity and mortality.
4. Screening recommendations for gestational diabetes.
5. The physiologic basis of aerobic and anaerobic metabolism.
6. The initial intravenous fluid therapy to provide to sick infants.
7. Recommendations for monitoring the blood glucose.
8. Signs of hypoglycemia, IV glucose treatment of hypoglycemia and post-treatment reassessment.
9. Indications for placement of umbilical catheters.
10. The principles for safe use of umbilical catheters.
11. Surgical and medical abdominal conditions that present as bowel obstruction

### Temperature

1. Infants at increased risk for hypothermia.
2. The normal physiologic response to cold stress for term infants.
3. Mechanisms of heat gain and loss.
4. The physiologic response to hypothermia for term and preterm infants.
5. Candidates for therapeutic neuroprotective hypothermia.

6. Methods to rewarm hypothermic infants and how to monitor hypothermic infants during rewarming.

### Airway

1. Labs and tests to obtain during the post-resuscitation / pre-transport period.
2. Signs of neonatal respiratory distress and how to distinguish between mild, moderate, and severe distress.
3. Blood gas interpretation and treatment of respiratory and metabolic acidosis.
4. Signs of respiratory failure.
5. Principles of assisted ventilation, including candidates for continuous positive airway pressure (CPAP), bag and mask or T-piece resuscitator positive pressure ventilation (PPV), assisting with endotracheal (ET) intubation, securing the ET tube, chest x-ray evaluation for ET tube position, and initial ventilatory support.
6. Respiratory illnesses and airway challenges that present in the neonatal period.
7. Identification and treatment of pneumothorax.
8. How to safely use analgesics to treat pain.

### Blood Pressure

1. The difference between compensated and uncompensated shock.
2. The principles of cardiac output and heart rate as they relate to shock and factors that can impair cardiac output.
3. The physical examination to evaluate for shock.
4. The causes and initial treatment of the three major types of shock seen in infants: hypovolemic, cardiogenic, and septic shock.

### Lab Work

1. Perinatal and postnatal risk factors that predispose infants to infection.
2. The clinical signs of neonatal sepsis.
3. Bacterial and viral organisms that may cause infection.
4. Laboratory tests to obtain in the pre-transport / post-resuscitation period.
5. White blood cell (WBC) development, how to calculate and interpret the absolute neutrophil count and immature to total ratio.
6. The initial antibiotic treatment of an infant with suspected sepsis.

### Emotional Support

1. The crisis families experience when an infant requires transport to, or care in, a neonatal intensive care unit.
2. Ways healthcare providers can support parents of sick infants.
3. Methods neonatal healthcare providers can use to facilitate parenting in the NICU.

### Quality Improvement

1. Concerns regarding patient safety and methods to reduce medical errors and preventable adverse events in this vulnerable population.
2. The importance of effective communication and teamwork to prevent harm and to improve patient safety.
3. Simulation-based education as a strategy to improve patient safety.

4. The importance of self-assessment and debriefing to evaluate care provided in the post-resuscitation/pre-transport stabilization period.

For more information please go to: <https://stableprogram.org/>

For course information or questions please reach out to STABLE Lead Instructor:

**Brooke Mascotto, MN, RN, STABLE Lead Instructor**

Orillia Soldier's Memorial Hospital

170 Colborne St. W

Orillia, ON

L3V 2Z3

[bamascotto@osmh.on.ca](mailto:bamascotto@osmh.on.ca)

(705) 791-5078