

## Foundational Elements of Labor and Birth

### Objectives

- Describe the anatomy and physiology of the uterus and the changes that occur during pregnancy and labor
- Review umbilical cord management strategies
- Compare and contrast pharmacologic and nonpharmacologic options for pain relief during labor

### Content Outline

1. Uterine Physiology
  - A. Anatomy and the nerve supply
  - B. Hormonal influences
  - C. Cervical ripening and parturition
2. Delayed Cord Clamping
  - A. Physiologic changes
  - B. Effects on different newborn populations
  - C. Umbilical cord milking
3. Types of Pain Experienced During Labor
4. Non-pharmacologic Management of Labor Pain
  - A. Relaxation techniques
  - B. Manual techniques
5. Pharmacologic Management of Labor Pain
  - A. Inhaled nitrous oxide
  - B. Opioids
  - C. Acetaminophen and NSAIDs

### Reading Material Resources

**Module WB2557: Foundational Elements of Labor and Birth** is based on the resources listed below. A copy of each resource is included with the module.

Uterine Physiology, Caine, et al., *Anaesthesia and Intensive Care Medicine* 23.6, Elsevier, 2022, 341-343

A newborn's "life line" – A review of umbilical cord management strategies, Koo, et al, *Seminars in Perinatology*, 46 (2022), 1-10

Pharmacologic and nonpharmacologic options for pain relief during labor: an expert review, Suarez-Easton, et al., *American Journal of Obstetrics & Gynecology*, Elsevier, May 2023, S1246-S1258