Vacuum Extraction — Don’t Get Sucked In!

The Pennsylvania Patient Safety Authority has received more than 300 reports of maternal and/or fetal injury associated with the use of vacuum devices. Although generally safe, locating the flexion point on the infant’s scalp and following these important steps may help delivering practitioners effect delivery while maximizing both maternal and fetal safety.

**Attempt to induce spontaneous vaginal delivery**
- Provide one-on-one maternal support.
- Use upright or lateral position.
- Use oxytocin, if indicated.
- Encourage delay in pushing until urge is very strong.

**Establish a clear indication for the procedure**
- A delay in the second stage of labor, which may compromise maternal or fetal well-being.

**Identify an exit strategy**
- Discuss when and why the procedure will be suspended.
- Outline plans for subsequent delivery.
- Inform obstetrical/neonatal team of the impending vacuum extraction.

**Obtain informed consent**

**Utilize adequate technical expertise**
- Locate correct placement of the vacuum cup on the flexion point (~3 cm in front of the posterior fontanelle, centered on the sagittal suture).
- Maintain traction in-line with the birth canal.
- Maintain traction in conjunction with uterine contractions.
- Avoid torque and rotational maneuvers during traction.

**Be familiar with the vacuum equipment**
- Know each manufacturer’s recommendations for maximum pressure, time on vacuum, and number of pop-offs.

**Maintain situational awareness**
- Empower team members to document and verbally confirm important parameters as specified by facility policy and/or manufacturer guidelines, such as the following:
  - Maximum pressure
  - Maximum time on vacuum
  - Maximum procedure time
  - Maximum number of pulls and/or pop-offs

**Perform a targeted postoperative assessment of mother and baby**
- Focus assessment on maternal perineal tissue and neonatal scalp.
- Inform subsequent caregivers about the vacuum extraction.

**Document the procedure**
- Document the indication, cup used, maximum pressure, time on vacuum, total procedure time, number of attempts, number of pop-offs, and any complications.

More information is available online at [http://www.patientsafetyauthority.org](http://www.patientsafetyauthority.org).