

# PERINEAL TRAUMA REDUCTION

FOR PROVIDERS ONLY

---

## Vacuum Types/Tips

There are single- and dual-operator types of vacuums. The dual type requires a non-disposable pump to be connected to a disposable cup. One operator controls the pump and its pressure while the other places the cup and performs the vacuum delivery. In general, single user disposable devices are recommended because of their ease of use and the full control they allow the delivery provider over the suction generator. These can also decrease controversy over the number of “pop-offs.”

There are also two basic types of vacuum cups in use today: the soft, pliable bell-type cup, and the more rigid mushroom cap-shaped cup. The latter is able to create a better hold on the baby’s scalp by generating a mechanical as well as a vacuum link. However, rigid cups are associated with increased risk of fetal scalp injuries.

Under no circumstances should the vacuum cup be mechanically rotated in attempt to rotate the baby. All rotations with vacuum instruments should occur spontaneously as the vacuum guides the fetal head through the path of least resistance through the maternal pelvis. You should probably choose one or two vacuum instruments and become highly skilled with them.

For the mushroom cup instruments, the edge of the cup should be placed two centimeters anterior to the posterior fontanelle or six centimeters posterior to the anterior fontanelle. Avoid placement directly over the fontanelle. Vacuum pressures should initially be raised up to 100 to 150 millimeters of mercury in order to maintain the cup’s position before being increased further to facilitate traction.