

# Suction Bulletin

Dear Bunnell Customers,

The purpose of this bulletin is to provide insights into suctioning when using the HFJV so that you can develop your official hospital or department suction policy.

## **Bunnell's Official Recommendation:**

Place the HFJV into Standby Prior to Suctioning

Unlike conventional ventilators, the jet injection and pressure monitoring ports are positioned inside the LifePort Adapter. The suction catheter passes directly in front of these ports. Depending on the size of the suction catheter in relation to the size of the ETT, the suction catheter can block the jet and pressure port. Thus, advancing the suction catheter can interfere with the pressure monitoring and jet delivery, which may trigger a High PIP and/or a Loss of PIP condition. High PIP causes the compliance chamber to dump pressure. Loss of PIP in Ready causes the Servo valves to be locked.

If the LifePulse is placed in Standby during a suction procedure, suctioning can be performed more consistently. Pressing the Enter button after completing a suction pass will quickly restore Jet ventilation to the patient. **The clinician should assure that pressures are back to pre-suctioning readings and the READY light illuminates prior to leaving the patient's bedside.**

## **Alternate Clinical Approach:**

If suctioning is performed with the ventilator running, make sure that the READY light is on before, during and after the suction procedure.

Bunnell learned that a number of clinicians preferred suctioning with the LifePulse running, similar to protocols used with conventional ventilation. The clinicians reported an advantage for patient stability since the LifePulse was attempting to provide ventilation throughout the suctioning procedure. An additional advantage reported is returning to a stable Ready condition after suctioning.

The LifePulse is designed to lock the Servo valves when a Loss of PIP alarm is activated as a result of suctioning, as long as the READY light is illuminated. This action allows the LifePulse to attempt to ventilate the patient during suctioning and quickly and independently (without button pushes) return to the set value.

However, even with the HFJV running in Ready, there is a chance that the patient may not be ventilated during or after suctioning. If after suctioning the Servo and or airway Pressure do not quickly return to pre-suction values, even if the Ready light is illuminated and the pinch valve is cycling, pressing the Enter button after completing a suction pass will restore Jet ventilation to the patient. **The clinician should assure that pressures are back to pre-suctioning readings and the READY light illuminates prior to leaving the patient's bedside.**

No matter how suction is performed, the clinician should assure that monitored pressures are back to pre-suctioning values and the READY light is illuminated before leaving the bedside.