

# What Are Self-Venting Syringes?

## Why Are They a Better Option for the Neonatal Patient?

Self-venting syringes do not have a solid syringe plunger that is pushed or pulled, creating positive or negative pressure, to infuse or collect fluids from a patient or line.

Instead, the self-venting syringe has a porous material in the plunger that allows the patient's pressure to push fluid up into the syringe (passive pressure fill), by allowing the air in the syringe barrel to be pushed out of the syringe when the fluid/blood flows into the syringe.

This is known as passive pressure filling of the syringe.

Most self-venting syringes also contain a substance on the vent material that seals the vent from further transfer of air or fluid after it comes in contact with the fluid/blood collected in the syringe.

This allows for a specimen of blood for example to be collected without negative pressure on the blood vessel, or having air in the collected sample which could alter blood gas values.

Thus a self-venting syringe is a clinically better, more accurate option when drawing blood gasses and lab specimens from neonatal patients.

Also, when using a self-venting syringe for waste / holding collection of blood, there is no air present in the waste after collection, and the risk of pushing air into the patient line when returning the waste/holding volume is eliminated.

## Recommended Self-Venting Syringes for Use With the Hummi Micro-Draw

### 1mL Self Venting Syringe **with 15units Balanced Lithium Heparin**

Primary Use:

Blood Gas Sampling Without Aspirating Pressure and Without Air in Sample Blood.

### 3mL Self Venting Syringe with NO Heparin.

Primary Use:

1. Collecting Waste Without Aspirating Pressure and Returning Waste to the Patient Without Risk of Air Embolism and No Heparin Load.
2. Collection of Lab Sample Without Heparin and With No Aspirating Pressure on Blood Vessel.