Syringe Flushing Challenges









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Challenges

- Constantly plunging, connecting, unloading, disconnecting syringe.
- 2. Syringe does not fit to all devices
- 3. Repetitive motion injuries
- 4. 2 handed process, one device at a time.
- 5. Standard copious flushing
- 6. Inability to monitor pressure





Devices

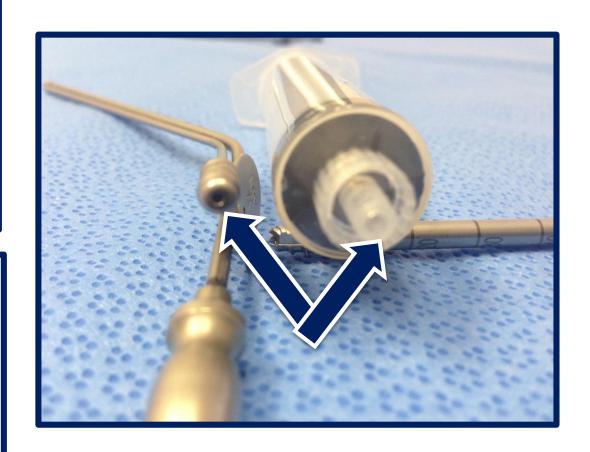


Device must have luer fitting for effective adaption



No luer on this reusable device, cannot connect syringe to device

Not all devices have luer fitting









There are thousands of 1ml-4ml channeled devices that a syringe will not adapt to





Syringe will not snuggly fit channeled devices greater than 4.05 mm openings



Formula

Formula For Calculating Pressure Generated by a syringe

Pressure = Force/ Area

Equation for PSI is Pressure= Force/Area ($A=\pi r^2$)

Pressure: The PSI generated by solution dispensed

Force: LBS. of force applied to plunger rod

Area: Cross section areas of the barrel (calculated $A=\pi r^2$)



Syringe Pressure Comparison Tables

	BD Standard Disposable Syringes						
	1mL	3mL	5mL	10mL	20ml	30ml	60ml
Inside Diameter	.185	.340	.472	.568	0.753	0.854	1.052
Cross Sectional Area	.0269	.0908	.1750	.2534	0.3765	0.427	0.526
PSI Generated Per 1 lb. Force on Plunger Rod	37.17	11.01	5.71	3.95	0.8459	0.7458	0.6055
PSI Generated Per 10 lb. Force on Plunger Rod	371.7	110.1	57.1	39.5	8.4587	7.4583	6.0546
Plunger Rod Force Required to Generate 40 lb. of PSI	1.35	3.6	8.76	10.1	?	?	?



The Solution is...

The FlexiPump Independent Flushing System

- ☐ Quickly flush 6 devices at once
- ☐ Copiously flush devices 90% faster than a syringe
- ☐ With one connection you can flush devices from 1ml- 5.5ml (syringe can only do 4ml device openings)
- ☐ Pure Station can flush 500 CC a minute with no hands
- ☐ SEE OUR DEMO
- http://www.youtube.com/watch?v=r4zRC rZ02fc&feature=youtu.be&hd=1



