# Evaluating Syringe Flushing: Is it worth the risk?

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# Can You Count On Syringes for Effective Surgical Instrument Cleaning?

## Evaluate syringe flushing practices

Syringes are a common flushing solution to remove bioburden from lumened or cannulated surgical instruments. They are still used by reprocessing departments today, despite newer solutions being available. It's time to take a deeper look at syringe flushing issues if you're one of those departments

You're likely aware of syringe shortcomings if your instrument reprocessing department uses them to flush bioburden from instruments. You may have delayed a change in favor of other priority projects. But it's time to reprioritize this issue

Consistent, standardized instrument flushing according to guidelines reduces the likelihood of healthcare-associated infections (HAIs). We can all agree that's important, not only for patients, but for clinicians and healthcare facilities as well. And the simple fact is syringes miss the mark. 34% of surgical site infections (SSIs) derive from inadequate cleaning before sterilization.1 Effective surgical instrument cleaning should be a priority to reduce that number.

It's time to evaluate your departmental syringe flushing practices for efficiency and accuracy. You're likely to discover the following issues.

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### Inconsistent flushing practices

Manual cleaning compliance is critical to reducing the likelihood of a surgical site infection. It would be ideal if everyone could flush exactly the same. But the reality is no two technicians or nurses do so. That leads to inconsistent syringe flushing, which does not meet surgical instrument cleaning IFUs. IFUs cannot be met if technicians flush differently from each other, or if technicians flush differently throughout their shift.

### Cleaning surgical instruments takes more time

Syringes can only flush one instrument at a time. Newer options enable technicians to clean multiple devices at once, and even engage with other tasks such as brushing complex pieces on devices or preparing the next tray for cleaning.

It has also been the case, that surgical instrumentation has become more complex and detailed in recent years. Certain surgical specialties will have instrumentation with multiple ports, or surgical cases will increase the number of instrumentation per case. This makes the demand on nurses and technicians more significant and keeping up with case carts more strenuous.

### Repetitive motion injury risk

Ergonomics is a key factor for technician success because repetitive motion injury can have lasting impacts for a sterile processing department and the entire team. Plunging and pulling 250mL can require as many as 10 syringe flushes. Imagine the impact to your technicians' hands and wrists as they use 10 syringe fills to clean each instrument.


Loading and depressing a syringe repeatedly is not only uncomfortable, but also an exponential injury risk to your technicians over time. That can become a staff safety issue, or even a satisfaction concern.

### Syringe waste impacts the environment

Most departments using syringes for flushing open a new syringe for each instrument (or have to take the time to disinfect the syringe between them). The excess use of syringes could add to landfill waste with potential negative impact on the environment. It's also a consistent and unnecessary expense to the department.

## Surgical instrument cleaning: A solution for syringe flushing issues

After evaluating your department for these four syringe issues, you'll likely wonder how to overcome them. The good news? There is a simple solution that can solve them all.

The FlexiPump™ Independent Flushing System was designed to flush internal instrument channels hands-free, and meet manufacturer's IFU as well as standards and guidelines.
**It resolves the above four syringe shortcomings in the following ways:**

1. Consistent internal device channel and lumen flushing during manual and pre-cleaning to meet IFUs
2. Can flush up to three instruments at once for efficiency and throughput
3. Eliminates repetitive motions associated with syringes
4. Is a reusable device that eliminates syringe waste

# Syringe flushing variability impact to surgical instrument manual cleaning: What's the risk?

The manual cleaning of reusable and cannulated instruments requires specific steps to meet IFUs, and adequately flushing them before the sterilization process is one of the most critical of these steps.

Many reprocessing departments continue to flush instruments with syringes for manual cleaning. For departments still using this method for flushing, it's important to fully understand how your prescribed methods for meeting IFUs can positively or negatively impact outcomes. Syringes, for example, have a hidden weakness beyond the control of your staff: variability of outcomes.

We can all agree variability is something to be avoided at all costs in any reprocessing department. Consistent flushing and cleaning must occur on instruments with channels where bioburden can lodge and escape the cleaning process. That same bioburden can later break free with potential to infect the next patient if it is not completely removed prior to sterilization. That means standards were not met, and a patient's outcomes could be negatively impacted. No department wants that.

Some may argue that syringes are just easier to use when flushing. Syringes may appear to shorten flushing time, and they don't come with own set of IFUs. At first glance they truly do seem like a viable option. So, what exactly makes them so risky?

### Technicians and nurses cannot flush the same each time

Technicians and nurses are human beings who may plan to perform consistently. But they are not robots calibrated to operate in exactly the same way during set tasks. Some days may be busier than others and technicians feel rushed to keep up. Or there may be other distractions in the department or from the OR. And sometimes people are simply preoccupied with the demands of their day. There is simply no way a technician can perform the exact same flushing process day to day. Steps can be skipped or inadvertently forgotten.

The bottom line is that no technician or nurse will flush a device with the same pressure and volume every single time. That means variability becomes a factor with each processed instrument.

### Syringes are not calibrated for performance

While every technician or nurse strives to meet standards and IFUs, it's a fact that no two people will flush an instrument the same way with syringes. That's because syringes cannot be calibrated to consistently perform for the user. They are a manual tool without presets for pressure or volume, and that leads to inconsistency. Syringes cannot indicate when manual cleaning and flushing steps are complete or thorough.

Syringes risk repeated performance variability without functions to guide a user or to confirm IFU flushing steps are complete.

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### Syringes can cause long-term strain and injury

The physical work involved for sterile processing technicians can be difficult. Handling multiple devices per day, lifting heavy instruments and trays, pushing carts and more already make it a physically demanding role. Add to that the repetition of these tasks day over day, and the risk for potential, long-term injury becomes compounded.

Those deceptive syringes mask an insidious impact to the technicians themselves. It may seem simple to draw and push a syringe multiple times to flush a surgical instrument. But try it for days. Weeks. Months and years. All that strain over time can contribute to ergonomic injuries to wrists and hands.

Ergonomic injuries to sterile processing staff can have far reaching impacts, starting with employee injury, workman's compensation, reduced department turnaround time and productivity, and even staff satisfaction. Are those simple, "easy-to-use" syringes worth it?

Lessen the risk of variability in your sterile processing department with one simple change: Swap out the syringes. Your department is a key participant in patient safety and outcomes. There would be no clean surgical instruments without you. To that end, all your practices, processes, and trained staff must be at their best. Investigate syringe flushing alternatives that can best support all of your initiatives and take care of your team.

Learn more about the FlexiPump Independent Flushing System to automatically flush internal instrument channels, free up technician time to perform additional tasks, and avoid the repetitive motion pain and injury associated with syringe flushing.

Every sterile processing department strives to meet standards, ensure the safety of reusable medical devices, and increase safety for patients. Flushing surgical instruments with syringes in past years was an acceptable practice. But recent improvements are available to help you meet all those goals you strive for, including staff safety and satisfaction.

It's time to take a deeper look at syringe flushing issues. You just can't count on syringes for effective surgical instrument cleaning anymore.

## It's time to eliminate the risk of SPD flushing variability

Access a free, 1 CE credit by watching our related **Royal Flush: Your Winning Hand for Pre-Cleaning Protocol** CE program, where we expand on this topic in more detail, and provide you with tools to make changes in your department.

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