Endoscopes are very complex biomedical devices. Outbreaks associated with flexible endoscopy have most often been associated with breaks in the cleaning and/or disinfection/sterilization stage of flexible endoscopy reprocessing. The reprocessing protocols provide a very narrow margin of safety and any slight deviation from the recommended steps may result in an increased risk of infection transmission by flexible endoscopes.

Steps to develop a High-Level Disinfection Program within the Organization:
1. Centralization of all high-level disinfection processing in the Sterile Processing Department.
2. Creating a high-level disinfection environment appropriate for HLD protocols according to infection control standards and AAMI ST58 recommendations.
3. Staff training and competency verification.
4. Proper documentation of high-level disinfection processes.

High-Level Disinfection Environment

- High-level disinfection should occur in a clean environment to prevent recontamination of the medical device as it is removed from the process.
- The space used for cleaning/decontamination should be separate from the space used for high-level disinfection of medical devices, and these spaces should be separate from patient procedure areas and personnel support areas.

Tools that Sterile Processing has implemented to ensure clean and safe scopes.

1. **Scope flushing device:**
   - The Replunger Scope Buddy endoscope flushing aid is designed to flush out the internal channels of flexible, reusable endoscopes. This device is used during the manual cleaning process stages of endoscope reprocessing. The advantages of this product include an ergonomic handle and a pressure control knob to maintain consistent water flow. This easy-to-use device is designed to fit into the endoscope channel and is compatible with any scope, manufacturer, or model. It is also equipped with a 90-degree coupler for straight scopes and a 360-degree coupler for flexible endoscopes. The device is recommended for use before chemical high-level disinfection.

2. **ATP Tester:**
   - **ADENOSINE TRIPHOSPHATE (ATP) is a molecule found in and around living cells. ATP transports chemical energy within cells for metabolism. The ATP test uses rapid, simple, and reliable method for verifying the effectiveness of the cleaning and decontamination process of all scopes and cannulated instruments.**

3. **Automatic Endoscope Reprocessor:**
   - **Medivator Advantage Plus is a fully automated, computer-based instrument for the reprocessing of endoscopes.**
   - *Medivator Advantage Plus is a highly automated, computer-based instrument for the reprocessing of endoscopes.**
   - The device is capable of reprocessing all endoscopes up to 96 endoscopes per batch, including endoscopes from various manufacturers, with a process time of 3.5 hours. The device uses advanced technology to ensure complete high-level disinfection of all endoscopes.
   - *The device is capable of reprocessing all endoscopes up to 96 endoscopes per batch, including endoscopes from various manufacturers, with a process time of 3.5 hours. The device uses advanced technology to ensure complete high-level disinfection of all endoscopes.*

Staff Training and Competency

ANSI/AAMI ST58 section 4.3 Training and continuing education
Personnel engaged in sterile processing and chemical high-level disinfection should:
- receive both an initial orientation and on-the-job training. A day-to-day orientation program is recommended and should be designed to lead to competency-based knowledge and skills in all tasks performed in the sterile processing department and in all decentralized areas responsible for chemical high-level disinfection.
- It should also include orientation in facility and department policies and procedures regarding infection prevention and control, safety, attire, personal hygiene, and compliance with state and federal regulations.
- In addition, continuing education should be provided at regular intervals to review and update worker knowledge and skills and to maintain worker competency and certification.
- Personnel should receive in-service training from the manufacturer for all new instrumentation, devices, and equipment. All orientation, on-the-job, and in-service training and competencies should be documented in personnel files.

Staff Training and Competency

- **Medivator Advantage Plus** is a fully automated, computer-based instrument for the reprocessing of endoscopes. It is a high-level disinfection process for all clinics.
- **Staff Training and Competency**

**Centralizing High-Level Disinfection Process throughout the organization**

The importance of this step was to identify what clinics/departments had semi-critical devices, and centralize the high-level disinfection process for all clinics and the OR. This ensures that the same standard of reprocessing and best practices are performed and all semi-critical devices are cleaned and HLD by trained staff who handle these reprocessing techniques daily.