



# Decreasing Instrument Contamination Rates Through SPD Partnership and Collaboration

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## Background

New management came to Braselton Surgery Center in January 2025. During leadership transition, conversations were had with surgeons about their greatest concerns. Tray contamination was one item discussed.

Reviewing data for the previous months found December to be at a rate of 1.9% which was almost double the system acceptable rate of less than 1%.

Month	ASC	Total # of Trays Processed	% of Contaminations	Contaminant	Count	Rate	Contaminant	Count	Rate	Contaminant	Count	Rate	
NOVEMBER	1092	7	0.6%	Cement x1	N	Bioburden x2 Hair x2	Y			Missing Filter x1	N	Foreign Debris x1	N
DECEMBER	1117	21	1.9%	Residue x2 Cement x3	Y	Bioburden x8	Y			Hole in Filter x1	N	Foreign Debris x5 Wet Tray x2	Y
JANUARY	1205	3	0.25%			Bioburden x2	Y					Mislabeled x1	N
FEBRUARY	1189	6	0.5%			Bioburden x1 Hair x1	Y			No Indicator x1	N	Foreign Debris x1 Container Clip Issue x2	Y
MARCH	1357	3	0.22%							Hole in Wrapper x1	N	Mislabeled Countsheet x2	N
APRIL	1276	11	0.9%	Cement/Adhesive x2	N	Hair x1	N	Hole in Wrapper x3	N	No looks x1	N	Foreign Debris x2 Disposable Left Behind x1 Instrument in locked position x1	N
MAY	1119	9	0.8%	Adhesive x1	N	Bioburden X1 Hair x2	N	Hole in Wrapper x1	N			Foreign Debris x1 Closed Clamps x1	N

## Assessment and Preparation

SPM is used for SPD instrument data tracking throughout the sterilization process. Further investigation revealed the majority of contaminations were residue, cement, bioburden, and foreign debris. These contamination reasons were shared with staff who gave insight into their individual workflow. The staff shared possible reasons for the occurrences.

A meeting with system SPD leaders and educator was scheduled. After discussion of possible contributors to the tray contaminations and other SPD leaders to observe ASC workflows, three items of focus were chosen based on AAMI standards and system best practices.

One focus would be the development of an immediate plan of correction. The next focus would be on OR point of use care (POUC). And finally, an assessment of tools available to staff during point of use care.

### BRASELTON ASC, LLC SPD PLAN OF CORRECTION: INSTRUMENT CONTAMINATIONS

**Situation:** Multiple contaminations r/t bioburden for cases week of 06/24-06/28. Contaminations resulted in delay of patient care and are a potential source of infection.

**Background:** ASC has been experiencing increased volume, particularly in orthopedics. Inventory is limited and there are few if any backup trays. SPD currently has 2 staff members, 1 in decontamination and 1 in prep and pack. SPD staff only work 8 hour shifts and are rushing to get instrumentation turned over for next day cases. Staffing model does not allow for "second check" prior to sterilization

**Assessment:** After consulting with SPD leaders, we determined there were several mitigation strategies that we can deploy to reduce the risk of contamination.

**Recommendations:** See table below

<b>Hair Management</b>	Staff will be required to apply head covering prior to dressing out in OR scrubs. Jackets will be required in "clean" side of SPD for tray assembly to reduce the risk of body hair entering trays.
<b>Sterilization container inspection</b>	Staff will be required to manually wipe and visually inspect each tray to confirm cleanliness prior to processing.
<b>Workstation cleaning</b>	As part of daily duties, SPD staff will wipe down their workstation and all flat surfaces used for assembly at the start of each shift
<b>Instrument discoloration</b>	Reach out to Lori Kennedy with Steris to schedule assessment of chemical dosing and water quality.
<b>Quality Reporting</b>	Create SOW for quality reporting in OR <ul style="list-style-type: none"> <li>Staff will utilize count sheet to document/track contaminations and other variances.</li> <li>Events will be entered into SPM for quality tracking.</li> </ul>
<b>Quality Assurance Checks</b>	Staff will perform 5 quality assurance checks of a random selection of instruments on all days that no cases are posted at the ASC

## Clinical Setting and Team Description

Braselton surgery center is the first ambulatory surgery center (ASC) for Northeast Georgia Health Systems (NGHS). The center has four operating rooms and two procedure rooms. The ASC performs orthopedic, podiatry, general, gyn, urology, and endoscopy service lines.

The ASC has 5 sister hospitals with The surgery center has 10 OR and 2 SPD employees. The two employees have almost two decades of experience between them.

ASC	TOTAL # OF TRAYS PROCESSED	TOTAL # OF CONTAMINATIONS	% of Contaminated Trays	CONTAMINANT REASON												
				Adhesive / Cement / Debris	Bioburden	Foreign Debris	Hole in Tray/Box	Hole in Wrapper	Indicator	Mislabeled	Missing Filter	Other Tray Error	TS			
JUNE	1205	1	0.1%					Hair x1	H							
JULY	1332	2	0.2%												Max Tray x1 Debris x1	H
AUGUST	1225	1	0.1%												Part x1	H
SEPTEMBER	1522	0	0.0%													
OCTOBER	1245	0	0.0%													
NOVEMBER	1113	0	0.0%													
DECEMBER	1222	0	0.0%													
JANUARY	1041	0	0.0%													

## Implementation and Results

The immediate plan of action included quality assurance checks, quality reporting, hair management, workstation cleaning, inspection of instruments and sterilization containers by SPD staff. The SPD educator developed education and provided oversight to confirm plan was being followed.

The policy for POUC was reviewed. Education was developed for both staff meeting and daily huddle to bring awareness to front line staff and standardize work between all staff members. After an available tool assessment for staff during POUC, the use of cidex pans was mandated for all orthopedic total joint cases without exception. Sterile brushes were implemented as an experiment to assist staff with removing debris from instrumentation. After brush trial was complete, staff gave feedback the brushes were not a value add. Experiment was completed and brush use discontinued.

After all measures were implemented and continued leadership support, the rate of contaminated trays consistently decreased. Contaminations were discussed both at huddle and staff meetings to make aware of occurrences in real time. As a result of these interventions, The end of FY25 and the first quarter of FY26 saw a reduction to zero contaminations for 5 consecutive months.