

Decreasing Contamination Based on CHG Scrub Time

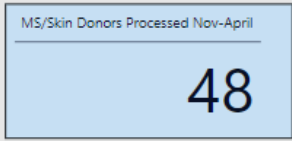
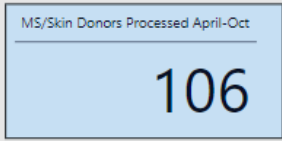
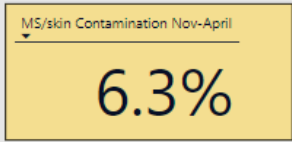
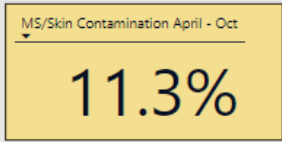
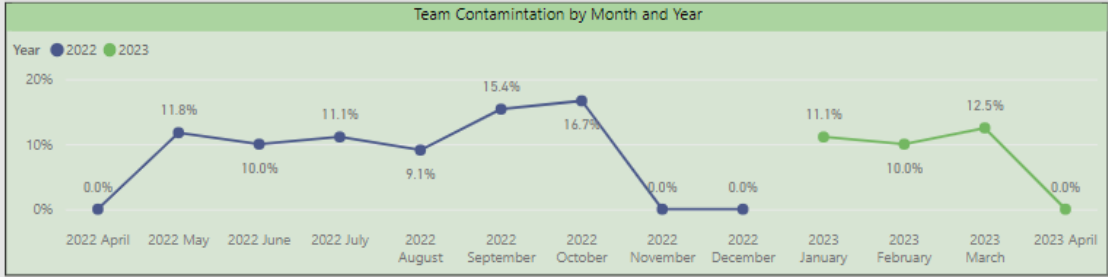
Authors: Allisen Wayda, CTBS; Alyssa Harrison, CTBS, MBA, MEd; Clint Hostetler, MHA, BSN, RN; Jeff Orlovski, MS, CPTC

Title: Decreasing Contamination based on CHG Scrub Time

Purpose: The objective was to test the effectiveness of a specific practice in reducing contamination rates during the tissue recovery procedure. One Organ Procurement Organization (OPO) studied the Chlorhexidine Gluconate (CHG) scrub times impact on the overall contamination rate of musculoskeletal and dermis tissue. The hypothesis was that a longer CHG scrub time would increase the contamination as a result of spreading contaminants during the extended scrub time. Further, we hypothesized that CHG contact time is more important than the duration of scrub time.

Method: The OPO's Tissue Recovery team schedule is based on a pod system. Starting November 1st, 2022, 1 pod was chosen to test the hypothesis as the control team. A two-step scrub process using CHG, with a one-minute scrub on the posterior side and another one-minute scrub on the anterior side. After each scrub, a 10-minute wait time was observed on both sides. The control team utilized donors only from Processors who were participating in the test run. Culture reports from the participating processors were collected, reviewed, and documented in a Power BI report to maintain near real-time visualization of contamination. All CAT 2 and CAT 3's reported by the various Processors calculated the contamination rate. The report consisted of several graphs and drilldowns to show any correlations, weak areas, or patterns.

Results: The results obtained from the study were as follows: From April 2022 to October 2022, the control team's contamination rate for MS/Dermis across the five participating Processors was 11.3%, n=106. However, from November 2022 to April 2023, during the implementation of the two-step scrub process, the same control team's contamination rate decreased to 6.3%, n=48. This indicates a significant 44% reduction in the overall contamination rate during the test period.



Discussion: These findings support our hypotheses that the implementation of the two-step scrub process, where the CHG scrub time is decreased and wait time with no scrub was added, has had a positive impact on reducing contamination rates during tissue recovery procedures. The use of Power-Bi reports allowed for continuous monitoring and analysis, facilitating the identification of trends and improvements. Further analysis may be necessary to evaluate the long-term effectiveness of this method.