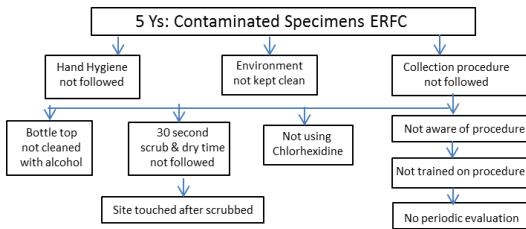


ER Fairfax City: Blood Culture Contamination Eradication

Team Members: Holly Odonnell, Elie Rhyu, Dr. Andrew Miner, Zebuniso Mehrobshoeva, Victoria McGalem, Adedayo Dada, ERFC Nursing and EMT Staff
Team Leaders: Sarah Stanmyre, MSN, RN, CEN and Tarahn Aiesi, BSN, RN, CEN
Executive Sponsor: Michelle Vassallo, MHA, RN, CEN

Introduction - Problem Statement

Emergency Room of Fairfax City (ERFC) had the highest blood culture contamination rate of all of the Inova Health System Emergency Rooms (ERs) at 3.8%. The estimated average cost of a blood culture contamination is \$7,500.00 and increases length of stay (LOS) by at least one day.



Results

We exceeded our goal of reducing contamination rates to <3%. Since development of this project we have successfully reduced our blood culture contamination rates every year with the lowest rate of **0.2%** in 2017.

2015	ERFC Total	ERFC Contaminated	% Cont	2016	ERFC Total	ERFC Contaminated	% Cont	2017	ERFC Total	ERFC Contaminated	% Cont
Jan	34	1	2.9	Jan	55	3	5.5	Jan	41	1	2.4
Feb	39	1	2.6	Feb	60	1	1.7	Feb	29	0	0.0
Mar	32	2	6.3	Mar	52	1	1.9	Mar	41	0	0.0
Apr	42	0	0.0	Apr	45	0	0.0	Apr	25	0	0.0
May	39	2	5.1	May	31	0	0.0	May	38	0	0.0
June	46	2	4.3	June	51	0	0.0	June	47	0	0.0
July	55	1	1.8	July	43	1	2.3	July	27	0	0.0
Aug	39	0	0.0	Aug	41	0	0.0	Aug	35	0	0.0
Sept	51	0	0.0	Sept	29	1	3.4	Sept	42	0	0.0
Oct	34	1	2.9	Oct	38	0	0.0	Oct	58	0	0.0
Nov	42	2	4.8	Nov	27	0	0.0	Nov	42	0	0.0
Dec	76	0	0.0	Dec	37	1	2.7	Dec	47	0	0.0
Annual Total	529	11	2.3	Annual Total	509	10	1.7	Annual Total	472	1	0.2

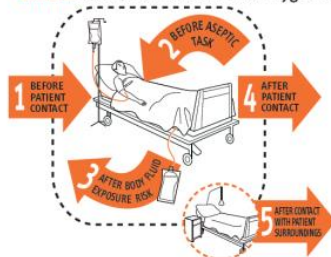
Improvement Achieved - Outcomes

- Improvements were achieved by:
- Reinforcement of Hand Hygiene
 - Ensuring staff followed the proper process of blood culture collection
 - Immediate reporting and daily tracking on the True North Board
 - Keeping the issue visible and in the forefront for staff
 - Having staff brainstorm improvement strategies after a contamination occurred

Project Goals/Aim Statement

The team's mission for improvement was focused on training and competency around compliance with the elements of the blood culture collection process as well as hand hygiene to reduce contamination rates to <3%.

WHEN? Your 5 moments for hand hygiene



Next Steps & Recommendations

We strive to sustain the improved outcomes and process changes and share our best practices with other free-standing ERs in the Inova Health System who face the same challenges of a small sample size. We would like to implement the same strategies at our sister facility, ER Reston/Herndon to reduce our blood culture contamination rate to **ZERO**.

