

Reduction of Blood Culture Contamination In an Emergency Department



Cathy Cooke, RN, MSN, CEN; Debra Gibson, RN, BSN, CIC,
Mary Lynn, RN, CEN

INTRODUCTION

The Emergency Department (ED) at Norton Women's and Kosair Children's Hospital (NWKCH) experienced a steady increase in their blood culture contamination rate for 2012 and 2013. In 2012 the ED blood culture contamination rate was 5.3%. In 2013 the ED blood culture contamination rate was 4.7%

PURPOSE

To reduce the blood culture contamination rate for the ED.

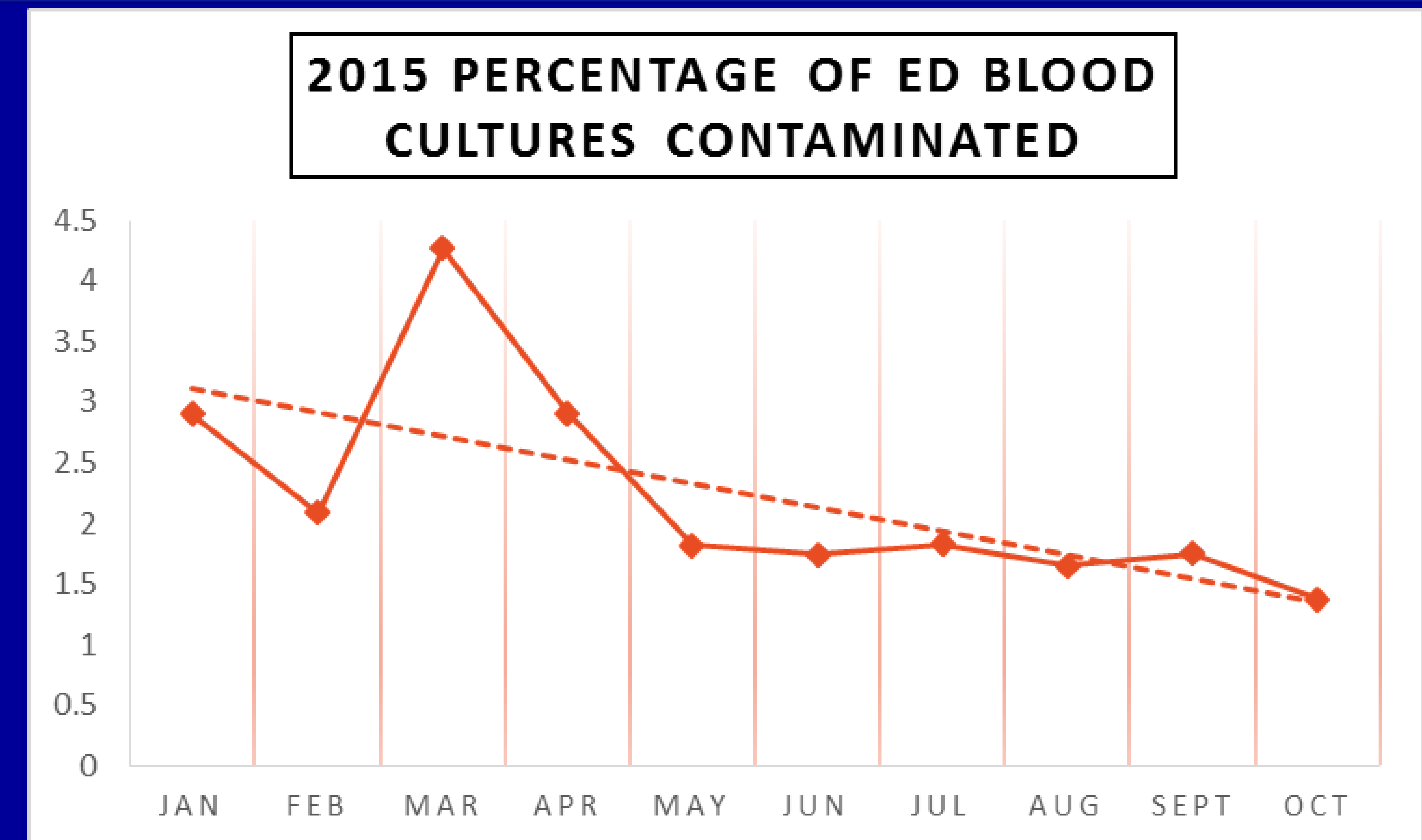
Benchmark set by NWKCH for blood culture contamination is $\leq 2\%$.



METHODS

- April 2014 task force was developed to address the issue.
- Instituted all recommendations from a consultant while tracking the blood culture contamination rates.
- July 2014, two additional actions were added to the gap analysis
 1. Sterile gloves when obtaining blood cultures
 2. Lab director required to send list of potentially contaminated blood cultures immediately upon determining the final result so staff member(s) could be counseled.
- The 2014 average rate for the ED was 2.8%.
- In April, 2015 a mask was added to the process.
- No contamination rates $> 2\%$ since April 2015

RESULTS



CONCLUSIONS

- Blood culture contamination rate $< 2\%$ since May 2015.
- Decreased the number of sticks the patient received from three to two when obtaining blood cultures.
- Nurses were much more aware of their technique and treated all IV insertions as blood culture collections.
- Resulted in a reduction in costs, length of stay and, unnecessary use of antibiotics.

EMAIL: Catherine.Cooke@Nortonhealthcare.org

ACKNOWLEDGEMENTS

Thanks to all ED staff members who willingly worked so hard to reduce the contamination rates.