

taminated with *Pseudomonas* species.⁸⁴ The CDC reported *Enterobacter cloacae* bloodstream infections traced to contaminated human albumin in two patients from two different states. This multistate outbreak was detected because of prompt reporting and resulted in a worldwide recall of 5%, 20%, 25% albumin, and other plasma derivatives. The epidemiologic and laboratory results seem to suggest that cracks in the glass were responsible for the contamination.⁸⁵

Bacterial Contamination of Stem Cells

Peripheral blood stem cells are being used with increasing frequency to provide hematologic reconstitution. Some centers have evaluated the bacterial contamination of stem cell harvests and found that the incidence of bacterial contamination before cryopreservation ranged from 0.23% to 0.65%⁸⁶ in untreated stem cells.⁸⁷ This incidence is lower than that reported for marrow harvesting which has been reported to be 2.1% immediately after collection.⁸⁸ After cryopreservation procedures, the bacterial contamination rate may increase by an additional 1%.⁸⁸ Investigators have suggested that some of the positive cultures seen after marrow and stem cell collection may be the result of exogenous contamination of blood culture bottles. The organisms usually implicated in contamination of stem cells and marrow products are skin flora including coagulase-negative staphylococci and alpha hemolytic streptococci. Most studies suggest that despite careful attention to the collection and processing methods, bacteria can be introduced before or during manipulation as well as at thawing. However, no adverse clinical sequelae have been noted following infusion of contaminated products^{89,91} because most recipients are receiving antibiotic therapy.

Conclusions

As discussed in this chapter, bacterial contamination of blood components has been and continues to be a serious and ongo-

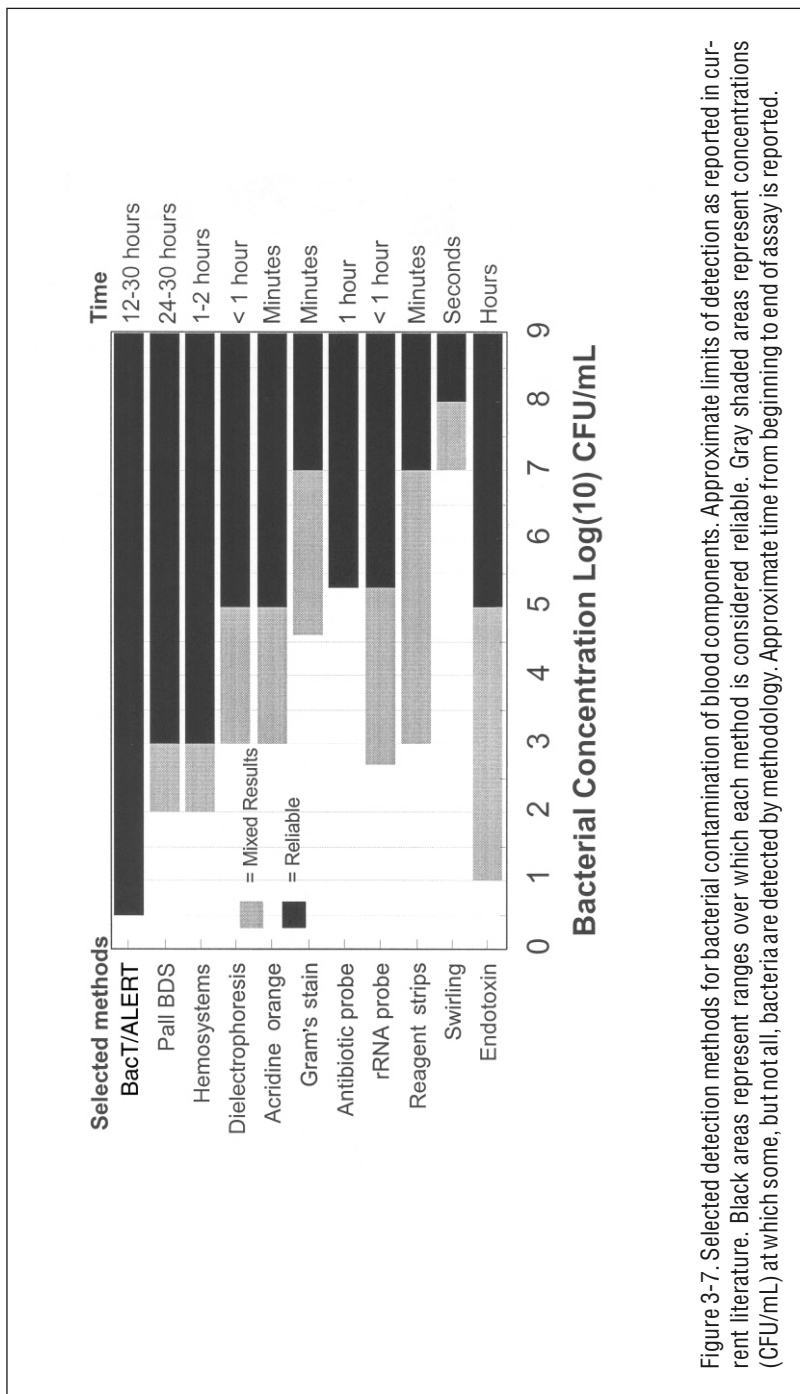
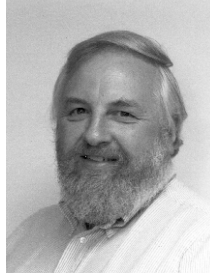


Figure 3-7. Selected detection methods for bacterial contamination of blood components. Approximate limits of detection as reported in current literature. Black areas represent ranges over which each method is considered reliable. Gray shaded areas represent concentrations (CFU/mL) at which some, but not all, bacteria are detected by methodology. Approximate time from beginning to end of assay is reported.

Appendix 3. President's Message*



Roger Y. Dodd, PhD

Our Voice at Work

In March 2003, AABB's Board of Directors approved the 22nd edition of Standards for Blood Banks and Transfusion Services. Over the years, the standards have introduced many required activities—some more welcome than others—but all aimed at improving transfusion safety for patients. As a board and as an organization, we have received extensive feedback about many of these initiatives from you, the members. In the past couple of years, the most common lament has been the inability of the blood banking community to prioritize, by importance, threats to transfusion safety.

The new edition of Standards presents the transfusion and blood banking community with a unique opportunity, that of responding to an issue identified as one of the greatest threats to transfusion safety. Unlike other challenges, the threat of bacterial contamination has been an issue owned and highlighted by our own membership.

One year ago, the AABB Board asked two prestigious committees, the Transfusion Transmitted Diseases Committee and

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