Guidelines on set change policies for the BD Alaris™ Pump module administration sets

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BD Alaris has been receiving customer inquiries regarding extending pump set change intervals for the BD Alaris™ Pump Infusion Set. The Alaris Pump Set labeling includes the following related to set change intervals: "The set should be changed according to facility protocol or in accordance with currently recognized guidelines for IV therapy." BD Alaris functional performance testing for rate accuracy, occlusion detection and air in line supports the use of the Alaris Pump Infusion Set for up to 96 hours (excluding blood or blood products). The information below provides well-accepted guidelines on extended set change policies to support conservation efforts in the event of low inventories or backorder situations for the BD Alaris™ Pump Module administration set.

The Centers for Disease Control (CDC) and Infusion Nurses Society (INS) have both published recommendations for set change intervals depending upon application.[1, 2.] For your convenience, we have provided some relevant statements from these sources. Please reference the documents in their entirety when establishing your facility's policies.

I. Centers for Disease Control (CDC) Guidelines

CDC's most recent publication from 2011 entitled Guidelines for the Prevention of Intravascular Catheter-Related Infections, states under the section *Replacement of Administration sets, "In patients not receiving blood, blood products or fat emulsions, replace administration sets that are continuously used, including secondary sets and add-on devices, no more frequently than at 96-hour intervals, but at least every 7 days. Replace tubing used to administer blood, blood products, or fat emulsions (those combined with amino acids and glucose in a 3-in-1 admixture or infused separately) within 24 hours of initiating the infusion. Replace tubing used to administer propofol infusions every 6 or 12 hours, when the vial is changed, per the manufacturer's recommendation."* There is no recommendation regarding the frequency for replacing intermittently used administration sets.

II. Infusion Nurses Society (INS) Standards

The INS Standards of Practice, updated in 2016, are aligned with the CDC in stating changing an administration set, *"no more frequently than at 96-hour intervals"*. However, it does not state *"but at least every 7 days"* as cited by the CDC. Additional information from the 2016 INS Standards of Practice for primary intermittent and secondary administration sets found in section 42, *Administration Set Change*, include: *"Primary intermittent administration sets should be changed every 24 hours"* and that *"If a secondary administration set is detached from the primary administration set, the secondary administration set is considered a primary intermittent administration set and should be changed every 24 hours."*

III. Other Sources

A 2013 Cochrane Library database of Systematic Reviews published a review titled, "Optimal timing for intravascular administration set replacement"[3] concluded *"some evidence indicates that administration sets that do not contain lipids, blood or blood products may be left in place for intervals of up to 96 hours without increasing the risk of infection. Other evidence suggests that mortality increased within the neonatal population with infrequent administration set replacement. However, much the evidence obtained was derived from studies of low to moderate quality."*

For any additional questions related to this information, please visit www.bd.com/MMSCOVID, call 858-617-1316 or email GMB-AlarisMedSafetyProgram@bd.com.

References

1. Center for Disease Control and Prevention: Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2011
2. Infusion Nursing Standards of Practice. Developed by Infusion Nurses Society. Supplement to January/February 2016. Volume 39, Number 1S
3. Ullman AJ, Cooke ML, Gillies D, March N, Daud A, McGrail MR, O'Riordan E. Optimal timing for intravascular administration set replacement. Cochrane Database of Systematic Reviews 2013, Issue 9. Art No.: CD003588