

Patient Safety Advisory

Veterans Health Administration Warning System
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Item: **Methicillin-resistant *Staphylococcus aureus* (MRSA) contamination in an orthopedic clinic room**

Specific Incident: Several patients who received joint/bursa injections in one orthopedic surgery clinic exam room, during a four-day period, developed infections. For those patients who had cultures grown, MRSA was identified as the causative agent. Infections may have been caused by improper preparation of injections, cross contamination between multidose vials and/or breach of appropriate practices following the collection of a specimen for microbiological culture from a patient who was infected with MRSA. During the investigation issues related to documentation were also identified.

Recommendations:

- 1) For joint/bursa injections that involve the injection of more than one medication from one syringe, it is strongly recommended to use single dose vials of each medication since the use of multidose vials increases the risk for cross contamination among patients. (Note: opened single dose vials must be discarded immediately after use on a patient). If use of single dose vial is not feasible, use the lowest volume multidose vial available.
- 2) Appropriate aseptic technique needs to be maintained when preparing medications for injection and for skin preparation before the injection. When preparing or drawing medications from single dose or multidose vials, always follow safe injection and administration practices.
- 3) If locked carts are used to store medications and supplies in rooms used for orthopedic clinic, they should not be used for any other purposes e.g. as a place to set specimens collected for culture.
- 4) All sterile supplies in clinic rooms are to be kept in closed cabinets, drawers, or closed carts.
- 5) Following any procedure done on an infected site, such as: aspiration of pus, open drainage, debridement or obtaining cultures performed in an orthopedic clinic room, the examination table and horizontal surfaces in the room should be wiped down with an EPA-registered hospital disinfectant before the next patient is placed in the room. If there is visible soilage, an EPA-registered disinfectant/detergent should be used for cleaning and disinfecting. In addition, all furniture such as exam tables, chairs, tables, carts, horizontal surfaces in examination/procedure rooms, sinks, and floors in the clinics should be cleaned and disinfected on a daily basis using

appropriate cleaning agents and an EPA-registered hospital disinfectant or an appropriate EPA-registered hospital disinfectant/detergent.

6) In accordance with VHA Handbook 1004.1 VHA Informed Consent for Clinical Treatments and Procedures (see link in Additional Information below), the patient's informed signature consent should be obtained for treatments and procedures that require injections of any substance into a joint space or body cavity, including any non-vascular space. iMed Consent™ should be used for electronic documentation of the patient's informed signature consent for the procedure in the electronic health record.

7) Documentation of the procedure should be in accordance with VHA Handbook 1907.01 Health Information Management and Health Records (see link in Additional Information below) and The Joint Commission standards. The practitioner who treats the patient is responsible for documenting and authenticating the care provided. Documentation in the clinical record following injections into a joint/bursa needs to include medications administered, including but not limited to the strength, dose, and route of administration. The scope of documentation should be comprehensive enough to provide continuity of care and ensure completeness for accurate coding of the procedure.

Additional Information: A multi-dose vial intended for multiple entries has a maximum 28-day beyond-use date from the date and time of initial entry unless otherwise specified by the manufacturer (per provisions in United States Pharmacopeia – USP USP 29 – NF 24 General Chapter <797> “Pharmaceutical Compounding – Sterile Preparations”). Selection of the 28-day time interval is based on the antimicrobial preservative effectiveness test (per provisions in United States Pharmacopeia USP 29-NF24 General Chapter <51> on “Antimicrobial Preservative Testing”). Product drawn from a single dose container (e.g. ampule, bags, bottles, syringes and vials) must be used within ONE hour and the container entered only one time. Single dose vials must be discarded immediately after use.

Link to VHA Handbook 1004.1:

http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=404

Link to VHA Handbook 1907.01:

http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1469

Source: A VA facility.

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