Key Messages Related to July 12, 2012 MMWR

Life-threatening infections can and do occur when medication from single-dose/single-use
vials is used for multiple patients. New evidence of such infections was just reported by the
CDC (MMWR, July 13, 2012).

Investigation 1: MRSA Infections in an Outpatient Pain Management Clinic - Arizona

- o When: April 2012
- Who: Three patients who received pain remediation and contrast injections
- Breaches: Use of single-dose/single-use vials of contrast media and saline solution for multiple patients and failure to wear facemasks during injection procedures
- Patient Impact: Three patients admitted to the hospital for severe infections including mediastinitis, bacterial meningitis, epidural abscess, and sepsis. A fourth patient who received contrast from the same vial was found deceased at home. The cause of death was reported as multiple-drug overdose; however, invasive MRSA infection could not be ruled out.

Investigation 2: Joint Infections (staph) in an Outpatient Orthopedic Clinic - Delaware

- o When: March 2012
- Who: Seven patients who received joint injections to relieve pain
- o Breach: Use of single-dose/single-use vials of bupivacaine for multiple patients. Two staff members responsible for preparing the injections were found to be colonized with *S. aureus*, one of whom had an identical match to the outbreak strain.
- Patient Impact: Seven patients admitted to the hospital with septic arthritis and/or bursitis. Three additional patients who received bupivacaine injections on the same days developed symptoms suggestive of infection and were treated as outpatients.
- Injection-related infections are completely preventable. Follow CDC guidelines: medication vials labeled as "single-dose" or "single-use" are to be used for only one patient.
 - o Injection safety guidelines can be found at www.cdc.gov/injectionsafety
- A possible drug shortage or a perception that medication is being wasted is not an excuse for unsafe injection practices. There are options that minimize risks to patients when medication doses from single-dose/single-use vials need to be divided.
 - o In circumstances when individually packaged and appropriately sized single-dose/single-use vials are unavailable (e.g., during national shortage), contents from unopened vials can be packaged into multiple single-use vehicles, as long as the repackaging is performed in accordance with all standards in United States Pharmacopeia General Chapter <797 >. Purchasers and healthcare providers can also encourage suppliers to package medication into commonly dosed volumes.
 - Protect patients. Follow safe injection practices in all healthcare settings, and encourage your colleagues to do the same. For more information about safe injection practices, visit the One
 Only Campaign website (www.oneandonlycampaign.org).

- The campaign is a public health effort, led by the Centers for Disease Control and Prevention (CDC) and partners of the Safe Injection Practices Coalition (SIPC), to raise awareness among patients and healthcare providers about safe injection practices.
- CDC recently restated injection safety recommendations, specifically those related to singledose/single-use vials.
 - o http://www.cdc.gov/injectionsafety/CDCposition-SingleUseVial.html
 - 27 professional organizations have formally endorsed this statement through the One & Only Campaign/SIPC.

Important Links

Main:

www.oneandonlycampaign.org

Healthcare Provider Toolkit:

http://www.oneandonlycampaign.or g/content/healthcare-provider-toolkit

Healthcare Provider Checklist:

http://www.cdc.gov/injectionsafety/ PDF/SIPC_Checklist.pdf

CDC Position Paper:

http://www.cdc.gov/injectionsafety/ CDCposition-SingleUseVial.html

CDC Injection Safety Website (FAQs, guidelines, etc.):

www.cdc.gov/injectionsafety

MMWR:

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6127a1.htm?s_cid=mm6
127a1_w