Division of Public and Behavioral Health
Technical Bulletin

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Topic: Early Identification of Carbapenem-resistant Enterobacteriaceae (CRE) / Inter-Facility Infection Control Transfer

Section/Program: Nevada DPBH/Office of Public Health Informatics and Epidemiology/Healthcare Associated Infections (HAI) Program

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To: All State-Licensed Health Care Providers and Facilities

Current Situation

An increasing incidence of CREs in both hospitals and long-term care facilities was recently observed in Nevada. According to the Centers for Disease Control and Prevention (CDC), the emergence and dissemination of carbapenem resistance among Enterobacteriaceae in the U.S. represents serious threats to the healthcare and public health system. These organisms can cause infections that are associated with high morbidity and mortality rates and may have the potential to spread widely. Decreasing the impact of these multi drug resistant organisms will require coordinated efforts involving all stakeholders including healthcare providers, healthcare facilities and the public health system.

Background

Invasive systemic infections caused by CRE have been associated with up to 50% mortality rates. CRE have already spread throughout the U.S. and other countries and have the potential to spread even more widely. Currently in the United States, CRE are primarily identified among patients with healthcare exposure. However, infections with CRE have the potential to spread outside the healthcare settings and spill into the community, given that Enterobacteriaceae are a common cause of community-associated infections.

Recommendations

- Early diagnosis and identification of patients with CRE, and prompt implementation of contact precautions (CP)
- Communication of CRE status for infected and colonized patients at discharge and transfer
- Identification of known CRE patients upon transfer or admission. It is strictly required to use the Inter-facility Infection Control Transfer Form to bring the situation to the attention of the receiving facility
- Implementation of effective hand hygiene programs that include providing easy access to hand hygiene stations and enforcing adherence to proper techniques
- Promote use of personal protective equipment (PPE) as needed
- Implementation of proper and timely environmental cleaning and decontamination
- Ongoing education and training of healthcare personnel as well as environmental health service staff, volunteers and visitors regarding proper contact precautions (CP), and allocating sufficient time to practice donning and doffing of PPE
- CRE colonization can extend for more than 6 months. When surveillance cultures are used to discontinue isolation precautions, more than one negative culture is required before discontinuing CP
- Acute Care: Place CRE colonized or infected patients on CP immediately. Empiric CP might be used for patients transferred from high-risk settings to a lower-acuity settings (e.g., non-ventilator units of skilled nursing facilities, rehabilitation facilities)
- Long-term Care: Place CRE colonized or infected patients/residents on CP. Screen patients with epidemiologic links to unrecognized CRE colonized or infected patients. Screen high-risk patients upon admission and periodically during their facility stay for CRE. Empiric CP should be considered while results of admission surveillance testing are pending

References and Resources

CDC's *Facility Guidance for Control of Carbapenem-resistant Enterobacteriaceae (CRE) – November 2015 Update CRE Toolkit*: https://www.cdc.gov/hai/pdfs/cre/CRE-guidance-508.pdf

For questions and additional information please contact your local health departments. You can also contact Kimisha Causey, State HAI Coordinator at kcausey@health.nv.gov or by phone at 702-486-3568.

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