

“HEALTHCARE-ASSOCIATED INFECTIONS: AN EMERGING PUBLIC HEALTH THREAT”

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Think Health. Act Now! - CITY OF MILWAUKEE HEALTH DEPARTMENT -

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What are healthcare-associated infections (HAIs)?

- **Healthcare associated infections (HAIs) are infections that patients develop during the course of receiving healthcare treatment for other conditions** (outpatient or inpatient)
- **Often linked to inadequate infection control activities within healthcare settings as well as certain medical procedures** (surgical sites, ventilators, catheterization, etc.)
- **Lengthen hospital stays, drive-up medical costs, challenging to treat, potential spread to other patients, high case fatality rates.**

HAIs by the numbers ...

(2011 CDC Acute-care Hospital Prevalence Survey)

- 1 in 25 hospital patients has at least one healthcare-associated infection
- There were an estimated 722,000 HAIs in U.S acute care hospitals in 2011.
- About 75,000 hospital patients with HAIs died during their hospitalizations.
- More than half of all HAIs occurred outside of the intensive care unit.

Diseases & Organisms in Healthcare Settings

- Acinetobacter Methicillin-resistant Staphylococcus aureus
- Burkholderia cepacia Mycobacterium abscessus
- Clostridium difficile Norovirus
- Clostridium sordellii Pseudomonas aeruginosa
- Enterobacteriaceae (CRE) Staphylococcus aureus
- Gram-negative bacteria Tuberculosis (TB)
- Hepatitis Vancomycin-intermediate Staphylococcus aureus and Vancomycin-resistant Staphylococcus aureus
- Human Immunodeficiency Virus (HIV) Vancomycin-resistant Enterococci (VRE)
- Influenza Klebsiella

Why are Healthcare-associated infections a public health threat?

- ❑ Increasing incidence globally
- ❑ Severe morbidity and mortality
- ❑ Growing antibiotic resistance
- ❑ Lack of standardized surveillance systems across states/countries
- ❑ Lack of coordination between public health and healthcare community
- ❑ New types of pathogens emerging
- ❑ Potential for spread beyond healthcare settings



CDC Key Strategies



- Promote and implement proven HAI prevention practices
- Increase use of National Healthcare Safety Network (NHSN) to track and report HAIs and target prevention
- Develop novel strategies to detect and prevent HAIs across the health care system

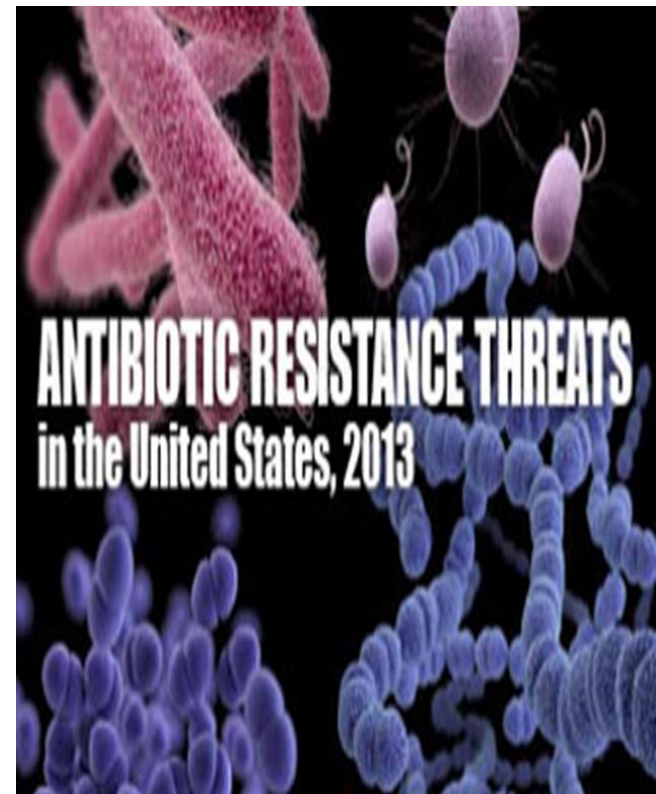
National Healthcare Safety Network

- Healthcare associated infection tracking system
- 12,000 facilities participating including LTCFs
- Provides data collection and reporting capabilities
- Identify problems and benchmark progress in solving problems



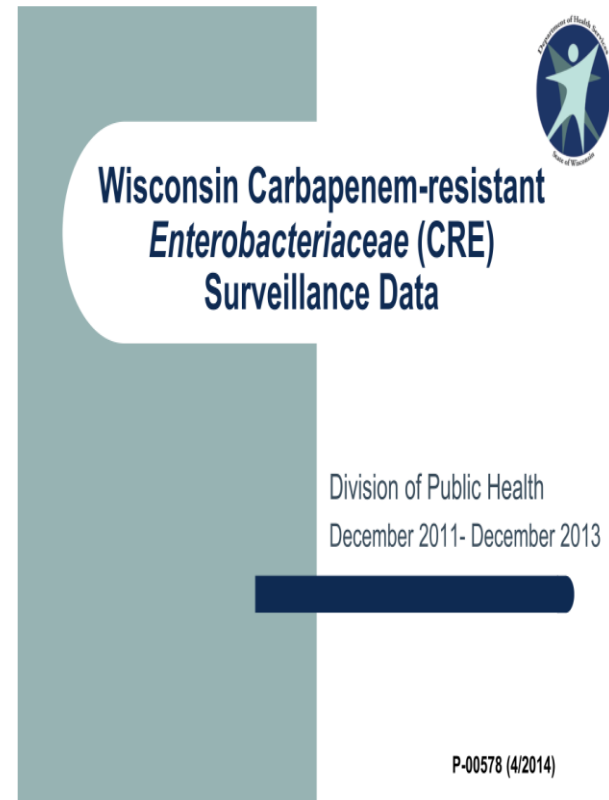
CDC Threat Report 2013

- Preventing Infections and Spread of Resistance
- Tracking Resistance Patterns
- Antibiotic Stewardship
- Developing New Antibiotics and Diagnostic Tests



Carbenapenem-resistant Enterobacteriaceae (CRE)

- ❑ Wisconsin State Health Department surveillance of hospital inpatients.
- ❑ Required reporting as of December 2011.
- ❑ SE Wisconsin has highest number of reported cases of CRE
- ❑ Linked to National Healthcare Safety Network at CDC



**Number of Reported Hospital Inpatients with
Carbapenem-Resistant *Enterobacteriaceae*
(CRE), Wisconsin
December 1, 2011- December 31, 2013**

Rectangular Snip

	Dec. 2011	2012	2013	Total
SE public health region	3	15	21	39 (80%)
Remainder of state	1	6	3	10 (20%)
Total	4	21	24	49

MHD Activities to Date

- **Sponsoring of two healthcare symposiums** thru funding by the National Association of City and County Health Officials (NACCHO)
- **Participation in development of a prevention toolkit and convening of an expert panel** along with the State of Wisconsin Division of Public Health.
- **Epidemiological coordination** and follow-up on all reported cases of CRE in City of Milwaukee
- **Development of website resources** including fact sheet and prevention information for healthcare providers and patients
- **Partnerships with hospital ICP and LTCFs** on improving local public health surveillance capacity and capabilities as well as prevention and control strategies

Thank you!

