SAN BERNARDINO COUNTY | Public Health Communicable Disease

2024

HAIIP CONNECTION

Healthcare-Associated Infections and Infection Prevention

WINTER ISSUE | FEBRUARY 2024

HAIIP PROGRAM OVERVIEW

The purpose of the HAIIP Program is to support skilled nursing facilities (SNFs), nursing homes, and other long-term care facilities during their response to outbreaks, and to build and maintain infection prevention programs to enhance resident, visitor, and healthcare personnel health and safety.

ANTIBIOTIC STEWARDSHIP PROGRAM: UTI

URINARY TRACT INFECTIONS IN LONG-TERM CARE FACILITIES

Urinary tract infections (UTIs) are the most common type of infection among the elderly population around the world and the most common cause of hospitalization due to bacterial infections. Older adults are more prone to UTIs as compared with young individuals due to the high rates of urinary retention, urinary incontinence, long-term hospitalizations, presence of comorbidities, accompanying urinary catheterizations, and declining immune responses. The incidence of UTI significantly increases in both men and women aged more than 85 years. The increased prevalence of **asymptomatic bacteriuria (ASB)** among the elderly population may lead to more difficulty in the diagnosis of UTIs. To reduce the threat of antibiotic resistance to public health, antibiotic stewardship programs and national guidelines for the rational use of antibiotics have been adapted to control this situation.

CONTENTS

HAIIP@DPH.SBCOUNTY.GOV
1 (800) 722-4794

CDPH HAI PROGRAM

UTI SUSPICIONS IN NURSING HOMES

Strong or foul-smelling urine or an acute change in mental status alone are not automatic indications to obtain urine specimens to rule out UTI. Katrien Latour and others found that acute dysuria and suprapubic pain are better indicators of a true infection.

Hence, it is crucial to refer to guidelines and tools available for diagnosing and treating residents. Understanding when it's a true UTI based on their criteria of definition will help reduce unnecessary testing and treatment.

SCREENING OR TREATING OLDER RESIDENTS?

The IDSA (Infectious Diseases Society of America) recommends against screening for or treating ASB in this population. This is because there is higher risk than benefit in treating ASB for this population. "In the elderly, antibiotic treatment of ASB likely does not reduce the risk of death or of sepsis. There are high-quality data to suggest that adverse effects are particularly common following the use of antimicrobials in this population, including CDI (*Clostridioides difficile* infection) and isolation of organisms with increased antimicrobial resistance."

To Culture or Not to Culture...

APPROPRIATE URINE CULTURE USE	INAPPROPRIATE URINE CULTURE USE
• Part of evaluation for sepsis without clear source • Local findings suggestive of **CAUTI** (catheter-associated urinary tract infection) • Prior to urological surgeries where mucosal bleeding anticipated or transurethral resection on prostate • Pregnancy	• Solely based on urine quantity, odor, color, turbidity, sediments • Obtaining **Urine Culture** (UCx) based on pyuria on **urinalysis** (UA) in asymptomatic patient • Asymptomatic Diabetes Mellitus • Asymptomatic elderly institutionalized or from community • Test of cure • Asymptomatic catheterized patients

WHAT IS ASYMTOMATIC BACTERIURIA?

Asymptomatic Bacteriuria (ASB) is when a patient without indwelling catheters has $\geq 10^5$ colony-forming units (CFU)/mL (≥108 CFU/L) in his/her voided urine specimen without signs or symptoms attributable to UTI.

DEFINITIONS BY THE NATIONAL HEALTHCARE SAFETY NETWORK (NHSN)

For detailed criteria for defining UTI events, please refer to the HAI Surveillance Protocol for UTI Events for LTCFs (Long-term Care Facilities). For further information on UTIs, such as LTCF training, UTI protocols, forms, etc., please visit Urinary Tract Infections | LTCF | NHSN | CDC.

ASB IN FUNCTIONALLY AND COGNITIVELY IMPAIRED PATIENTS

"In older patients with functional and/or cognitive impairment with bacteriuria and delirium (acute mental status change, confusion) and without local genitourinary symptoms or **other systemic signs of infection (for example: fever or hemodynamic instability)**, we recommend assessment for other causes and careful observation rather than antimicrobial treatment."

IDSA recommends **this because the adverse outcomes such as *clostridioides difficile* infection, increased antimicrobial resistance, or adverse drug effects from antimicrobial therapy outweigh the benefit in this population.**

HAIIP@DPH.SBCOUNTY.GOV
1 (800) 722-4794

CDPH HAI PROGRAM

STANDARD PRECAUTIONS

Standard precautions are the basic practices that apply to all types of patient care, regardless of the patient's suspected or confirmed infectious state, and apply to ALL settings where care is delivered. These practices protect healthcare personnel and prevent healthcare personnel or the environment from transmitting infections to other patients.

ELEMENTS OF STANDARD PRECAUTIONS

1. **Hand hygiene**
2. **Environmental cleaning and disinfection**
3. **Injection and medication safety**
4. **Assess risk of transmission to select PPE**
5. **Minimizing potential exposures**
6. **Reprocessing reusable medical equipment**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Health care personnel need immediate access to PPE and training to be able to select proper PPE based on:

- Nature of the patient interaction
- Potential for exposure to infectious material

TYPES OF PPE

Gloves: wear gloves when it can be reasonably anticipated that you may have hand contact with the following:

- Blood
- Mucous membranes
- Non-intact skin
- Potentially contaminated skin
- Potentially contaminated equipment

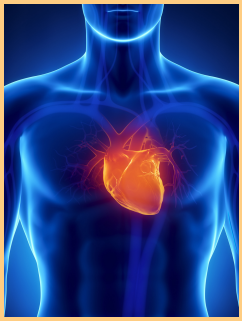
Gowns: wear a gown during procedures when coming into contact with blood, body fluids, secretion, or excretions:

- Appropriate to the task
- To protect skin
- To prevent soiling of clothing

Masks and protective shields: select and use protective eyewear and a mask, or a face shield:

- To protect the mucous membranes of the eyes, nose and mouth
- During procedures and activities that could generate splashes or sprays of blood, body fluids, secretions and excretions

TYPES OF HEALTHCARE-ASSOCIATED INFECTIONS (HAI)



Modern healthcare employs many types of invasive devices and procedures to treat patients and to help them recover. Infections can be associated with the devices used in medical procedures, such as catheters or ventilators.
These healthcare-associated infections (HAIs) include:

- Central line-Associated Bloodstream Infections (CLABSI)
- Catheter-associated Urinary Tract Infections (CAUTI)
- Surgical Site Infections (SSI)
- Ventilator-Associated Pneumonia (VAP)

AMERICAN HEART MONTH, IN FEBRUARY, IS A GREAT TIME TO FOCUS ON CARDIOVASCULAR HEALTH

HAIIP@DPH.SBCOUNTY.GOV
1 (800) 722-4794