

# Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey

Centers for Disease Control and Prevention (CDC) and Emerging Infections Programs (EIP)

## Project Overview

### What is the Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey project?

- It is a point-prevalence survey for healthcare-associated infections (HAIs) and antimicrobial use in a sample of U.S. acute care general and general children's hospitals.
- A "point prevalence survey" is a short (e.g., 1 day), cross-sectional data collection effort.
- The survey will provide critical information on the burden and types of HAIs affecting patients in U.S. hospitals and on use of antimicrobial drugs.

### Why is it important to conduct this survey? Doesn't the CDC's National Healthcare Safety Network (NHSN) provide this information?

- Most hospitals participating in NHSN focus on surveillance of device- and procedure-associated HAIs. This survey, which is CDC's *first large-scale HAI prevalence survey in more than 30 years*, will complement NHSN data by addressing all HAIs (including those that are not associated with a medical device or procedure) across all acute care inpatients, to inform local and/or national policies and help target HAI surveillance efforts.
- This is also CDC's *first-ever, large-scale antimicrobial use prevalence survey* among U.S. acute care inpatients. This information will help inform and target antimicrobial stewardship efforts.
- For these reasons, the survey has the full support of the Association for Professionals in Infection Control and Epidemiology (APIC) and the Society for Healthcare Epidemiology of America (SHEA).
- The objectives of the survey:
  - 1) Estimate HAI prevalence in a large sample of U.S. acute care inpatients;
  - 2) Determine the distribution of HAIs by pathogen (including antimicrobial-resistant pathogens) and major infection site across the spectrum of hospital locations; and
  - 3) Estimate the prevalence and describe the rationale for antimicrobial use in a large sample of U.S. acute care inpatients.

### What are the Emerging Infections Programs (EIP)?

- EIP is a network of 10 state health departments (CA, CO, CT, GA, MD, MN, NM, NY, OR, TN) and their collaborators. EIP works with CDC on a variety of infectious disease surveillance and prevention-oriented projects, including this HAI and Antimicrobial Use Prevalence Survey effort.
- Additional information is available at: <http://www.cdc.gov/ncpcid/deiss/eip/>.

### How is this survey being conducted, and what is the role of the hospital Infection Preventionist?

- Each EIP site will be engaging approximately 25 randomly-selected hospitals within its catchment area, for a total of about 250 hospitals in the 10 EIP sites.
- EIP staff members will ask Infection Prevention staff in randomly-selected hospitals to agree to voluntarily participate.
- Hospitals that are selected are not required to participate, but participation will help preserve the sampling approach and the quality of the survey methodology and results.
- EIP staff will coordinate survey activities in each site and will be the contact persons for the participating hospitals.
- Hospital staff will be asked to assemble a "Primary Team (PT)."

## *CDC/EIP Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey Overview*

- The PT will perform survey activities in their own hospital.
- The PT Leader should be an Infection Preventionist, if possible. EIP staff will work with hospitals that do not have an Infection Preventionist to identify another qualified individual to fill this role. Other PT members are chosen by the PT Leader.
- The PT will work with EIP staff to select a survey date. This date will be any single day (Monday-Friday) between May 1 and July 31, 2011.
- A few weeks before the survey date, the PT will work with EIP staff to map acute care hospital units to CDC location codes. These are the same codes that hospitals assign to units when participating in NHSN. Please note—your hospital does NOT have to participate in NHSN to participate in this survey.
- On the survey date, a random sample of inpatients in each participating facility will be surveyed. EIP staff will do most of the work to generate this random sample. The PT will only need to obtain its hospital's inpatient census on the morning of the survey date.
- Data collected by PTs will include patient demographics, device use (central line, catheter, and ventilator), and whether the patient is on antimicrobials.
- Data collection by the PT will be limited to the day of the survey. EIP staff will later collect detailed information from medical records about HAIs and antimicrobial use.

### **How will the data be kept confidential?**

- CDC and EIP sites will know the identities of the hospitals that are selected to participate and the identities of hospitals that actually participate in the survey.
- Data will be collected from existing medical records only. There is no direct interaction with patients or patient interviews.
- No patient identifiers, other than selected dates (such as admission date) will be shared with CDC. However, the PT will need to collect patient identifiers and share them with the EIP team.
- Survey records will use ID codes in lieu of hospital names and patient names; these codes will not be based on information that could be decoded to identify a hospital or patient. Links between codes and identifiers will kept in secure locations in hospitals and EIP sites, and will not be shared with CDC.
- CDC will analyze and report only aggregated data.
- Patient identifiers (except selected dates) that are collected and maintained in a secure manner by the PT or EIP team will be destroyed after survey data collection and analysis are complete.

### **What are the benefits to my hospital in this survey?**

- This project is an important step in clarifying the burden and types of HAIs occurring in acute care patients in the United States. We do not have recent, rigorously derived estimates of the scope and burden of HAIs. The estimates provided by the survey will inform national surveillance efforts.
- To improve antibiotic use in acute care hospitals, we need to understand what antimicrobials are being used and in what settings. This survey will provide this information.
- Participating hospitals will benefit by gaining experience in prevalence survey methodology that could be employed in hospital-level infection control and antimicrobial stewardship-related assessments.
- Because we are minimizing the workload, hospitals will not survey enough patients to get precise estimates of HAIs and antimicrobial use at the hospital level. However, CDC and/or EIP staff will provide overall survey results to participating hospitals after the survey is completed.
- A letter or certificate of appreciation from CDC and the EIP site will be provided to survey participants.

**How much time is required to participate?**

*4-6 Weeks before the Survey*

- For some hospitals, time may be needed to prepare and submit an Institutional Review Board (IRB) application to your hospital's IRB. In our 2010 preliminary survey effort, CDC and some state health departments and participating hospitals deemed the survey to be a non-research activity, and therefore it did not require IRB review. Your hospital may or may not require IRB review.
- You will be asked to work with EIP staff to obtain a list of your hospital's acute care inpatient units and to map each of these units to CDC location codes (if not already mapped). We estimate this will take 1-2 hours.
- You and other PT members will need to take 1-2 hours of survey training. Training will be done via webinar or in person in your hospital. We will work to arrange the training for a convenient time.

*Morning of the Survey (between 12:00 am and 8:00 am)*

- Between 12:00 am and 8:00 am, you will obtain a hard copy of your hospital's inpatient census for the survey day.

*Survey Date (during normal working hours)*

- The PT will conduct basic medical record reviews on 75-100 randomly-selected patients. Most hospitals will survey 75 patients (if your hospital has fewer than 75 patients, you will survey all acute care inpatients); large hospitals will survey 100 patients.
- In a pilot survey, PTs spent on average 7 minutes per medical record review. This means that it will take 4-5 hours for a PT composed of 2 people to collect data on 75 patients.
- Estimated total time commitment (preparation, training, record review and data collection):
  - Small or medium-size hospital: 13 hours
  - Large hospital : 16 hours

*After the Survey Date*

- You may be asked to provide limited assistance to EIP staff during the time they are reviewing medical records of surveyed patients in your hospital. This will not include any additional medical record review on your part, but might include activities such as orienting EIP staff to your medical records department and/or medical record system.

**For more information:** Contact your EIP site. We will be happy to address any concerns you may have about the burden of these activities. If your hospital is randomly selected to participate, EIP staff will work with you to find ways to allow you and your hospital to participate.

**EIP contact name:**

**Email address:**

**Phone number:**

**Thank You!**