Healthcare-associated infections (HAI) are infections that patients acquire while receiving health care in hospitals and other types of healthcare facilities. HAI can be caused by a variety of bacteria, fungi, and viruses. Commonly reported HAIs include *Clostridioides difficile* (C. diff) infection (CDI), central line-associated bloodstream infection (CLABSI BSI), methicillin-resistant *Staphylococcus aureus* bloodstream infection (MRSA BSI), vancomycin-resistant Enterococci bloodstream infection (VRE BSI) and surgical site infection (SSI).

About one in 25 hospital patients acquires an HAI. Most HAI are preventable by following infection prevention care practices. The CDPH HAI program oversees the prevention, surveillance, response and reporting of HAI and antimicrobial resistance (AR) in California's hospitals and other healthcare facilities. Since 2010, the HAI Program:

- Receives and publicly reports CA hospital HAI data to provide health care quality information to the public and prompt providers to take action to prevent infections
- Follows up with hospitals that have high infection rates and engages them in HAI prevention initiatives
- Convenes statewide and regional HAI/AR prevention collaboratives to coordinate prevention efforts among facilities that commonly share patients
- Assists local public health agencies to investigate and respond to unusual infection occurrences and outbreaks that occur in healthcare facilities
Message From the HAI Chief, Dr. Erin Epson

Infection prevention is more critical than ever for public health!

The ongoing COVID-19 pandemic has shone a light on infection prevention gaps and vulnerabilities throughout the healthcare continuum and across the spectrum of HAI and AR threats. SNF and other long-term care facilities were devastated by COVID-19 outbreaks. Hospitals experienced substantial increases in CLABSI and MRSA BSI incidence. Regional multi-facility outbreaks of \textit{Candida auris} spread to new regions. Multiple pandemic-related factors likely contributed, including diversion of resources from infection prevention activities, disruptions in routine care practices, personal protective equipment supply shortages and misuse, and antimicrobial prescribing changes. Clearly, there is a tremendous need to support our healthcare partners as they recover, build capacity and foster resiliency in their infection prevention programs.

The CDPH HAI Program has grown tremendously in scope and staffing since its establishment in 2010, from 10 original staff members focused on HAI surveillance and reporting requirements in hospitals, to > 60 positions now working on HAI and AR prevention, surveillance, response and reporting across the healthcare continuum ... and we are continuing to grow!

With this new newsletter, we aim to introduce ourselves to new partners and broaden our engagement with existing partners. Please feel free to reach out to us if you’d like to learn more about any of our initiatives, or to suggest a new opportunity. We look forward to hearing from you, and to our ongoing collaboration to ensure safer health care for all Californians!

Sincerely,
Erin Epson, MD
Meet the HAI Program

Communications and Operations Team
Manages HAI Program internal operations, personnel, performance metrics, and internal and external communications including the website, webinars and online educational offerings.

Data and Research Team
Establishes and maintains HAI Program data standards, produces the annual HAI public and Health Care Provider Flu Vaccination reports and interactive maps, and provides technical assistance to program staff on use and analysis of data.

Infection Preventionist Team
Conducts infection prevention assessments to identify gaps in care practices, and provide evidence-based recommendations to acute care hospitals, skilled nursing facilities (SNF), outpatient dialysis clinics, ambulatory surgery centers (ASC), and other healthcare settings as part of prevention initiatives or response to outbreaks or unusual infection occurrences.

Prevention Epidemiology Team
Designs and implements HAI and AR prevention projects, conducts data analyses to inform HAI and AR prevention priorities, guide project planning and assess impact.

Investigations Team
Provides consultation and technical assistance to local health departments (LHD) in epidemiologic investigation of HAI and AR outbreaks, unusual infection occurrences, and infection control breaches.
2021 HAI Team Highlights

Communications and Operations
- Hosted 10 webinars and 25 online trainings for over 6,000 registrants
- Created 10 new webpages and 35 webpages updated
- Hosted 4 HAI Advisory Committee and 6 subcommittee meetings
- Onboarded 12 new team members

Infection Preventionist
- Created online infection prevention trainings for SNF and LHD infection preventionist staff
- Provided an 8-week Environmental Services training course for ventilator-equipped SNF
- Trained LHD teams on how to conduct COVID-19 assessments
- Coordinated Respirator Fit Testing Train the Trainer Program

Data and Research
- Created and published the HAI and Healthcare Provider (HCP) Influenza Vaccination public reports and interactive maps.
- Contributed to data analyses for COVID-19 analysis projects.

Prevention Epidemiology
- Conducted AR and COVID-19 analysis projects
- Coordinated proactive AR prevention and response activities and LHD capacity building.
- Completed 38 Project Firstline trainings for SNF certified nursing assistants.
- Increased Antimicrobial Stewardship Program (ASP) Honor Roll membership
- Launched California AS Collaborative Network (ASCN)

Investigations
- Provided consultation and support for numerous COVID-19 and non-COVID-19 outbreak investigations
- Communicated regarding COVID-19 guidance updates.
Preventing HAIs: HAI Interactive Map
(www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/HAIMap.aspx)

Public reporting of hospital HAI data allows Californians to assess the quality of care in hospitals and make more informed health care choices. The HAI interactive map provides data for five HAI types from all California acute care hospitals. All acute care hospitals must report to CDPH all cases of CDI, CLABSI, MRSA BSI, VRE BSI, and SSI (CA Health and Safety Code 1288.55).

Hospital Map: Dropdown menus allow the user to filter by locations and infection types. All dropdown menus interact with each other, so a selection in one dropdown menu will determine the selections available in other dropdown menus. For instance, if “San Francisco” is selected in the “Select by County” dropdown menu, then only hospitals located in San Francisco County will appear in the “Select by Hospital” dropdown menu.

Hospital Comparison: Select up to three specific hospitals to compare against each other. The Hospital Comparison shows data for multiple HAI types so make sure to scroll down to see all the information!

SSI Comparison: Select up to three specific hospitals to compare against each other. The SSI Comparison shows data for 28 procedures so make sure to scroll down to see all the information!

Statewide & County Profile: Click the drop-down menu to select a specific hospital type or county to view a profile with aggregated data from all hospitals of a specific type or in a specific county.

Resources: A list of Frequently Asked Questions and a map user guide for step-by-step screenshots on how to use map’s features.

Share comments or questions about the interactive map by contacting the HAI Program at HAIProgram@cdph.ca.gov
Get Involved:

**Infection Prevention (IP) Training for Skilled Nursing Facilities (SNF) Online Course**
(reg.learningstream.com/view/view_month.aspx?as=76&wp=427&aid=HAIP)

This online course provides practical guidance for implementing an infection prevention program in a skilled nursing facility using evidence-based guidelines for preventing healthcare-associated infections including central line associated bloodstream infections (CLABSI), *Clostridioides difficile* infection (CDI), catheter-associated urinary tract infections (CAUTI), COVID-19, and pneumonia. Students will learn how to measure staff adherence to infection prevention care practices and educate and provide feedback to staff. Students will also learn how to use their facility HAI data to focus infection prevention strategies, conduct an outbreak investigation, and how to implement the essential activities to prevent employee infections.

**Local Health Department (LHD) Infection Preventionist (IP) Online Course**
(reg.learningstream.com/view/view_month.aspx?as=76&wp=443&aid=HAIP)

This 14-hour self-paced course is designed for public health professionals to work around their schedule and does not have to be completed in one session. This online course provides foundational infection prevention and control training for infection preventionists (IP) and IP specialists working in local health departments. Students will learn evidence-based recommendations for preventing healthcare-associated infections including CLABSI, CDI, urinary tract infections (UTI), pneumonia, and SSI, as well as the basics of microbiology and antimicrobial resistance, and steps for investigating HAI outbreaks. Students will learn skills and tools for performing facility-based infection control assessments, measuring adherence to infection prevention care practices, and providing feedback to staff. Students will also learn how to use facility HAI data to focus infection prevention strategies and how to access additional resources and available support for LHD IPs.

**Project Firstline**
(www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/ProjectFirstlineRegistration.aspx)

Project Firstline is a CDC-funded initiative that provides infection prevention and control education and training to frontline healthcare workers. In California, Project Firstline will focus specifically on Certified Nursing Assistants (CNA) in skilled nursing facilities. In coordination with public health infection prevention partners, Project Firstline’s team of regionally-based infection prevention trainers will offer competency-based health education and training. Together we can reduce HAI in California SNF, and keep our residents safe and healthy!

**Antimicrobial Stewardship Program Honor Roll**
(www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/Honor_Roll.aspx)

The California Department of Public Health HAI Program is pleased to recognize top performing antimicrobial stewardship programs in California. The goals of the ASP Honor Roll are to promote optimal use of antimicrobials, prevent emergence of antimicrobial resistance and *C. difficile* infections, and to showcase California healthcare facility ASP that not only follow national guidelines, but also demonstrate outcomes and engage their local healthcare community.

**CONTACT US:**

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