Prevention Status Report for Hawaii

Healthcare-Associated Infections

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About the Prevention Status Reports

The Prevention Status Reports (PSRs) highlight—for all 50 states and the District of Columbia—the status of public health policies and practices designed to address the following important public health problems and concerns:

- Alcohol-Related Harms
- Food Safety
- Healthcare-Associated Infections
- Heart Disease and Stroke
- HIV
- Motor Vehicle Injuries
- Nutrition, Physical Activity, and Obesity
- Prescription Drug Overdose
- Teen Pregnancy
- Tobacco Use

PSR Framework

Each report follows a simple framework:

- Describe the public health problem using public health data
- Identify potential solutions to the problem drawn from research and expert recommendations
- Report the status of those solutions for each state and the District of Columbia

Criteria for Selection of Policies and Practices

The policies and practices reported in the PSRs were selected because they—

- Can be monitored using state-level data that are readily available for most states and the District of Columbia
- Meet one or more of the following criteria:
  - Supported by systematic review(s) of scientific evidence of effectiveness (e.g., The Guide to Community Preventive Services)
  - Explicitly cited in a national strategy or national action plan (e.g., Healthy People 2020)
  - Recommended by a recognized expert body, panel, organization, study, or report with an evidence-based focus (e.g., Institute of Medicine)

Ratings

The PSRs use a simple, three-level rating scale—green, yellow, or red—to show the extent to which the state has implemented the policy or practice in accordance with supporting evidence and/or expert recommendations. The ratings reflect the status of policies and practices and do not reflect the status of efforts of state health departments, other state agencies, or any other organization to establish or strengthen those policies or practices.

Suggested Citations

For a state report:

Centers for Disease Control and Prevention. Prevention Status Reports: [State name]. Atlanta, GA: US Department of Health and Human Services; 2016. Accessed [month date, year].

For the National Summary:

Centers for Disease Control and Prevention. Prevention Status Reports: National Summary. Atlanta, GA: US Department of Health and Human Services; 2016. Accessed [month date, year].

Public Health Problem

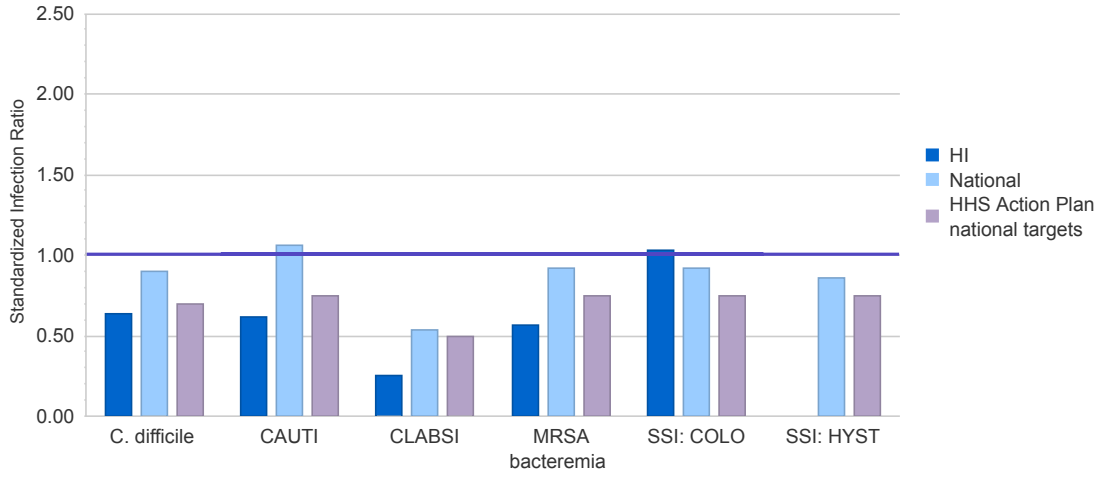
Healthcare-associated infections (HAIs) are linked with increased illnesses, deaths, and healthcare costs (1, 2). Each year, about 1 in 25 US hospital patients is diagnosed with at least one infection related to hospital care. In 2011, there were approximately 722,000 HAIs in US acute care hospitals, and approximately 75,000 hospital patients with HAIs died during their hospitalizations (2).

Many HAIs are caused by antibiotic-resistant (AR) pathogens and Clostridium difficile (C. difficile), often as a consequence of inappropriate antibiotic use. Each year in the United States, at least 2 million people are infected by an AR pathogen and at least 23,000 will die as a direct result of these infections (3).

More than half of all hospital patients receive an antibiotic, and 30%–50% of all antibiotics are prescribed inappropriately or are unnecessary (4). Poor prescribing practices put patients at risk for adverse reactions and also contribute to antibiotic resistance, making these drugs less likely to work in the future.

Despite progress in reducing some HAIs—such as central line-associated bloodstream infections (CLABSIs)—more progress needs to be made in preventing other infections, including C. difficile infection and catheter-associated urinary tract infections (CAUTIs). These infections can be prevented by using infection control and prevention procedures in healthcare settings and improving antibiotic prescribing.

2013 Standardized Infection Ratios (SIRs) Compared to National SIRs, HHS Action Plan Targets, and National Baseline



Source: 2015 National and State Healthcare-Associated Infections Progress Report, based on 2013 data (5); National Action Plan to Prevent Health Care-Associated Infections: Roadmap to Elimination (6)

Standardized infection ratio compares infections that occurred to infections predicted.

MRSA: methicillin-resistant Staphylococcus aureus

SSI: surgical site infections

COLO: colon surgery

HYST: abdominal hysterectomy

National baseline (purple line): For more information, visit the FAQs (http://www.cdc.gov/psr/faq.html)

Solutions and Ratings

This report highlights two practices to reduce HAIs and AR:

- Implementing state activities to build capacity for HAI prevention
- Implementing stewardship programs to improve antibiotic use in acute care hospitals

Improving health care through HAI and AR prevention, detection, and response are priorities for CDC, the US Department of Health and Human Services (HHS), and the White House. The White House's National Strategy for Combating Antibiotic-Resistant Bacteria (CARB) and National Action Plan stress the judicious use of antibiotics to prevent transmission of AR infections (7,8). The HHS HAI action plan sets national goals for reducing HAIs and provides a framework for state HAI prevention plans (6). In CDC's 2014 National Healthcare Safety Network (NHSN) Annual Hospital Survey, 39.2% of US hospitals reported having antibiotic stewardship programs (9) that included seven core elements CDC deems critical for such programs (4).

Other strategies supported by evidence include optimizing infection control practices within healthcare facilities, using a coordinated regional approach to preventing infections, and implementing CDC's Targeted Assessment for Prevention (TAP) strategy (10,11).

Status of Policy and Practice Solutions

State activities to build capacity for HAI prevention

State health department implementation of activities to improve the state's ability to prevent and control HAIs across four prevention areas: 1) building and maintaining partnerships (e.g., collaborating with quality improvement organizations or hospital associations), 2) supporting HAI-related outbreak response by building infrastructure to identify and respond to reports of outbreaks in healthcare settings, 3) conducting or supporting HAI training, and 4) validating HAI data (i.e., analyzing data for quality and completeness and/or reviewing medical records to check data accuracy).

As of July 31, 2015, Hawaii's HAI activities addressed all four prevention areas (11).

Rating	Number of HAI prevention areas addressed
Green	**All four**
Yellow	Three
Red	Two or fewer

HHS's HAI action plan sets national goals and targets for reducing and preventing HAIs (6). CDC helps states achieve these targets by providing technical expertise and assistance in addressing the following prevention areas: HAI partnerships, outbreak response, training, and data validation. State programs that address these four areas are critical for reducing HAIs (6). Increasing states' capacity to prevent HAIs can reduce illnesses, save money, and improve healthcare quality for patients (6).

How This Rating Was Determined

The rating reflects the number of HAI prevention areas the state has addressed. Ratings are based on data from a CDC 2015 survey of state HAI coordinators, which asked states whether their HAI prevention activities had addressed the following prevention areas: HAI partnerships, outbreak response, training, and data validation (12). Data validation responses were confirmed using the findings of the 2015 National and State Healthcare-Associated Infections Progress Report (13).

Stewardship programs to improve antibiotic use in acute care hospitals

Programs in acute care hospitals that incorporate seven core elements CDC deems critical to successful hospital antibiotic stewardship: 1) leadership commitment, 2) accountability, 3) drug expertise, 4) actions to improve antibiotic use, 5) tracking antibiotic use and outcomes, 6) reporting antibiotic use and outcomes to staff, and 7) education (4).

As of December 2014, 25.0% of acute care hospitals in Hawaii reported having antibiotic stewardship programs that incorporated all 7 core elements deemed critical by CDC (9).

Rating	Percentage of acute care hospitals with antibiotic stewardship programs
Green	≥75.0%
Yellow	50.0%–74.9%
Red	**≤49.9%**

The White House's National Strategy and Action Plan for fighting antibiotic resistance encourage the use of antibiotic stewardship programs to ensure and improve the judicious use of antibiotics (7,8). AR infections prolong hospitalizations and increase costs, disabilities, and deaths. Inappropriate antibiotic use is a major cause of these infections. Stewardship programs in acute care hospitals are critical to improving antibiotic use and prescribing practices, ensuring optimal treatment of patients, and prolonging the time antibiotics are effective (4). Stewardship programs can reduce AR infections, C. difficile infections, and antibiotic adverse events; decrease drug and healthcare costs; and improve healthcare quality for patients.

How This Rating Was Determined

The rating reflects the percentage of the state's acute care hospitals participating in the Patient Safety Component of NHSN that reported having antibiotic stewardship programs that incorporated CDC's seven core elements (4). Ratings are based on data from the 2014 NHSN Annual Hospital Survey Patient Safety Component (9).

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