

## **An Introduction to the Nevada State Healthcare-Associated Infection Plan**

In response to the increasing concerns about the public health impact of healthcare-associated infections (HAIs), the Nevada State Health Division has developed an Action Plan to prevent Healthcare-Associated Infections (Nevada State Action Plan). The Nevada State Action Plan includes recommendations for surveillance, communication and metrics for measuring progress towards Nevada's goals. This is a 2 year plan. The six goals to be achieved by the end of two years include the following:

- Progress towards 2-year state prevention targets to reduce central line-associated bloodstream infections (CLABSI) by at least 25% from baseline or to zero in Intensive Care Units (ICU) and other locations;
- To achieve a 25% reduction in incidence rate of HAI invasive *Methicillin-resistant Staphylococcus aureus* (MRSA) infections;
- To reduce the admission and/or readmission of surgical site infections by at least 25% from baseline or to zero;
- To improve use and quality of surveillance systems, metrics and supporting systems used by medical facilities;
- To increase appropriate antibiotic use and resistance awareness through an antibiotic stewardship program; and
- Prioritization and broad implementation of current evidence-based prevention recommendations.

The Nevada State Plan will help to ensure progress towards national prevention targets as described in the HHS Action Plan, wherein CDC is leading the implementation of recommendations on National Prevention Targets and Metrics and the implementation of priority prevention recommendations, the Nevada State Plan is tailored to the specific needs of Nevada.

Initial emphasis for HAI prevention may focus on hospitals and ambulatory surgical centers, yet the need for prevention activities for other medical facility types is recognized. State health departments are increasingly challenged by the need to identify, respond to, and prevent HAI across the continuum of settings where healthcare is currently delivered. The public health model's population based perspective places health departments in a unique and important role in this area, particularly given shifts in healthcare delivery from acute care settings to ambulatory and long term care settings. In the non-hospital setting, infection control and oversight have been lacking and outbreaks –which can have a wide-ranging and substantial impact on affected communities-, are increasingly reported. At the same time, trends toward mandatory reporting of HAIs from hospitals reflect increased demand for accountability from the public.

The current Nevada State Plan targets the following areas:

1. Develop or Enhance HAI Program Infrastructure
2. Surveillance, Detection, Reporting, and Response
3. Prevention
4. Evaluation, Oversight and Communication

## **Framework and Funding for Prevention of HAIs**

CDC's framework for the prevention of HAIs builds on a coordinated effort of federal, state and partner organizations. The framework is based on a collaborative public health approach that includes surveillance, outbreak response, research, training and education, and systematic implementation of prevention practices. Recent legislation in support of HAI prevention provides a unique opportunity to strengthen existing and expand state capacity for prevention efforts.

Support for HAI prevention has been enhanced through the American Recovery and Reinvestment Act (ARRA). Congress allocated \$40 million through CDC to support state health department efforts to prevent HAIs by enhancing state capacity for HAI prevention, leverage CDC's National Health Care Safety Network to assess progress and support the dissemination of HHS evidence-based practices within healthcare facilities, and pursue state-based collaborative implementation strategies.

Nevada applied for \$1,574,569 to address all areas of HAI prevention efforts. We were, however, only funded for slightly more than \$201,000 and expected to only address Level 1 activities.

## **The Development of the Nevada State Action plan**

The Nevada State Action Plan provides HAI prevention activities in the four areas identified above. In the Nevada State Action Plan you will find Level 1 activities, which indicate basic elements to begin HAI prevention efforts, as well as Level II activities, which are considered intermediate level prevention efforts. Nevada only received federal grant funding to implement Level 1 activities but due to Nevada regulatory mandates, as well as the fact that Nevada has already began work on Level II activities, you will also find some Level II activities in Nevada's Action Plan.

## 1. Develop or Enhance HAI program infrastructure

Successful HAI prevention requires close integration and collaboration with state and local infection prevention activities and systems. Consistency and compatibility of HAI data collected across facilities will allow for greater success in reaching state and national goals. Below you will find Nevada’s Action Plan for reducing HAI’s in Nevada’s medical facilities.

**Table 1:** State infrastructure planning for HAI surveillance, prevention and control.

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Establish statewide HAI prevention leadership through the formation of multidisciplinary group or state HAI advisory council	<b>Dec 2, 2009</b>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> <li>i. Collaborate with local and regional partners (e.g., state hospital associations, professional societies for infection control and healthcare epidemiology, academic organizations, laboratorians and networks of acute care hospitals and long term care facilities (LTCFs))</li> <li>ii. Identify specific HAI prevention targets consistent with HHS priorities</li> </ul>	<b>Dec 2, 2009</b>
			<b>The following organizations have been invited to participate in the first HAI state planning meeting: Nevada Hospital Association, Nevada Rural Hospital Partners, Nevada Ambulatory Surgery Center Association (NASCA), Southern Nevada Chapter of the Association for Professionals in Infection Control and Epidemiology (APIC), the Northern Nevada Infection Control (NNIC) network, Nevada State Public Health Laboratory University of Nevada; Administrator, Nevada State Health Division (NSHD), Nevada State Health Officer, Nevada State Epidemiologist, Washoe County Health District, Southern Nevada Health District, Carson City Health and Human Services, and representatives from the NSHD Bureau of Health Care Quality and Compliance (BHCQC). Following the</b>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p>December 2<sup>nd</sup> meeting, others may be invited to participate in future meetings.</p> <p><b>NOTE: The following will be invited to participate in future HAI state advisory meetings: NV Board of Medical Examiners, NV Board of Osteopathy, NV Board of Nursing, NV Board of Podiatry, Nevada Medical Association, Nevada Nursing Association and Nevada schools of public health, medicine and nursing.</b></p> <p>Since March 2009, the Nevada State Health Division (NSHD) Bureau of Health Care Quality and Compliance (BHCQC) employs an Infection Preventionist and associated E.P.I. Team (Education Prevention Intervention) for the purpose of providing education and consultation in infection prevention and control for all Nevada healthcare facility types regulated by BHCQC. In addition the EPI Team provides support, education and consultation to the BHCQC surveyors. In July 2009 the BHCQC held the first two day HAI statewide conference incorporating education and training with newly passed legislative updates.</p>	
	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>  <input type="checkbox"/>	<p>2. Establish an HAI surveillance prevention and control program</p> <ul style="list-style-type: none"> <li>i. Designate a State HAI Prevention Coordinator</li> <li>ii. Develop dedicated, trained HAI staff with at least one FTE (or contracted equivalent) to oversee the four major HAI activity areas (Integration, Collaboration, and Capacity Building; Reporting, Detection, Response and Surveillance; Prevention; Evaluation, Oversight and Communication)</li> </ul>	<p><b>January 1, 2010</b></p>
			<p><i>Other activities or descriptions (not required):</i>  <b>Within the Bureau of Health Care Quality and Compliance is the</b></p>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p><b>Quality Improvement Unit. The HAI State Plan Coordinator along with the Infection Preventionist will oversee HAI activity to include the further development of the HAI program infrastructure; surveillance, detection, reporting and response; prevention to include training and NHSN implementation; and evaluation, oversight and communication. Currently the Infection Preventionist is the acting HAI State Plan Coordinator.</b></p>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>3. Integrate laboratory activities with HAI surveillance, prevention and control efforts.</p> <p style="padding-left: 40px;">i. Improve laboratory capacity to confirm emerging resistance in HAI pathogens and perform typing where appropriate (e.g., outbreak investigation support, HL7 messaging of laboratory results)</p>	
			<p><b>Following receipt of laboratory findings, the Office of Epidemiology (NSHD) and the State Epidemiologist are key to identifying, trending and analyzing laboratory results and other information related to Reportable Diseases. The BHCQC will be notified when the concern is related to one of the BHCQC facilities. Additional partners include the Carson City HHS, Washoe County Health District and Southern Nevada Health District. Data is also collected and analyzed from BHCQC survey results and EPI Team assessments. Education and consulting are provided by the EPI Team.</b></p>	
<b>Level II</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>4. Improve coordination among government agencies or organizations that share responsibility for assuring or overseeing HAI surveillance, prevention and control (e.g., State Survey agencies, Communicable Disease Control, state licensing boards)</p>	
			<p><b>The QI Unit of the BHCQC is responsible for all issues related to</b></p>	<p><b>June 1, 2010</b></p>

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p><b>NHSN (National Healthcare Safety Network). As intent to implement NHSN was just passed in our 2009 legislative session, the QI Unit is currently writing the draft regulations and intending to have statewide data collection begun by June 1, 2010. Collaborative efforts will include relationships with the Nevada Hospital Association, NSHD Administration, the BHCQC, the State Public Health Laboratory, the Southern Nevada chapter of the Association for Professionals in Infection Control and Epidemiology (APIC), the Northern Nevada Infection Control (NNIC) network, and communicable disease programs within the county and state offices.</b></p>	
	☒	☒	<p>5. Facilitate use of standards-based formats (e.g., Clinical Document Architecture, electronic messages) by healthcare facilities for purposes of electronic reporting of HAI data. Providing technical assistance or other incentives for implementations of standards - based reporting can help develop capacity for HAI surveillance and other types of public health surveillance, such as for conditions deemed reportable to state and local health agencies using electronic laboratory reporting (ELR).</p>	
			<p><b>Conversations are currently underway among Infection Preventionists (IPs) and infection control software vendors throughout Nevada and the use of Clinical Document Architecture (CDA) – we’re very close to “going live” in many facilities. Once NHSN is “live” in Nevada CDA will greatly enhance the abilities of the IP to forward NHSN data more timely and with less risk of data entry error.</b></p> <p><b>The “Nevada Interactive Health Database” (found on the NSHD home page) is another means of accessing Nevada healthcare information electronically.</b></p>	<b>Dec 31, 2010</b>

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.				

## 2. Surveillance, Detection, Reporting, and Response

Timely and accurate monitoring remains necessary to gauge progress towards HAI elimination. Public health surveillance has been defined as the ongoing, systematic collection, analysis, and interpretation of data essential to the planning, implementation, and evaluation of public health practice, and timely dissemination to those responsible for prevention and control.<sup>1</sup> Increased participation in systems such as the National Healthcare Safety Network (NHSN) has been demonstrated to promote HAI reduction. This, combined with improvements to simplify and enhance data collection, and improve dissemination of results to healthcare providers and the public are essential steps toward increasing HAI prevention capacity.

The Nevada State Action Plan identifies targets and metrics for three categories of HAIs – see below. Ventilator-associated Pneumonia is an HAI under development for metrics and targets:

- Central Line-associated Blood Stream Infections (CLABSI) **Intended to be in effect in June 1, 2010 in hospitals**
- *Clostridium difficile* Infections (CDI) N/A at this time.
- Catheter-associated Urinary Tract Infections (CAUTI) N/A at this time.
- Methicillin-resistant *Staphylococcus aureus* (MRSA) Infections **Intended to be in effect in June 1, 2010 in hospitals.**
- Surgical Site Infections (SSI) **Intended to be in effect by October 1, 2010 in ASCs and July 1, 2011 in hospitals.**
- Ventilator-associated Pneumonia (VAP) N/A at this time (metrics and targets under development).

**In addition, a separate NHSN module addressing antibiotic stewardship (AUR) is also targeted for implementation Jan 1, 2011.**

<sup>1</sup> Thacker SB, Berkelman RL. Public health surveillance in the United States. *Epidemiol Rev* 1988;10:164-90.

State capacity for investigating and responding to outbreaks and emerging infections among patients and healthcare providers is central to HAI prevention. Investigation of outbreaks helps identify preventable causes of infections including issues with the improper use or handling of medical devices; contamination of medical products; and unsafe clinical practices.

**Table 2:** State planning for surveillance, detection, reporting, and response for HAIs

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	☒	☐	1. Improve HAI outbreak detection and investigation	
	☐	☒	i. Work with partners including CSTE, CDC, state legislatures, and providers across the healthcare continuum to improve outbreak reporting to state health departments.	
	☒	☐	ii. Establish protocols and provide training for health department staff to investigate outbreaks, clusters or unusual cases of HAIs.	<b>June 30, 2010</b>
	☒	☒	iii. Develop mechanisms to protect facility/provider/patient identity when investigating incidents and potential outbreaks during the initial evaluation phase where possible to promote reporting of outbreaks.  iv. Improve overall use of surveillance data to identify and prevent HAI outbreaks or transmission in HC settings (e.g., hepatitis B,	<b>June 1, 2010</b>

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			hepatitis C, multi-drug resistant organisms (MDRO), and other reportable HAIs)	
			<i>Other activities or descriptions (not required):</i> <b>i. Data collected from BHCQC surveys and EPI Team assessments are being analyzed to identify trends, clusters and outbreaks; this will be further developed in 2010.</b>  <b>ii. The HAI coordinator will work with the QI Unit to establish protocols and training opportunities for IPs and/or BHCQC staff to identify and/or investigate outbreaks, clusters or unusual cases of HAIs.</b>  <b>iv. The EPI Team will work with the HAI coordinator in assessing hospital and ASC surveillance programs. This will include interpretation of data to identify trends, clusters and outbreaks as well as identifying harmful breaks in technique or protocol.</b>	<b>June 30, 2010</b>  <b>Feb 1, 2010</b>
	☒	☒	2. Enhance laboratory capacity for state and local detection and response to new and emerging HAI issues.	
			<i>Other activities or descriptions (not required):</i>  <b>PCR capability is available to all hospital labs through the state public health labs in both Reno and Las Vegas.</b> <b>PLAN: survey monkey to determine if PCR educational campaign is needed</b>	<b>Aug 1, 2010</b>
<b>Level II</b>			3. Improve communication of HAI outbreaks and infection control	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	breaches <ul style="list-style-type: none"> <li>i. Develop standard reporting criteria including, number, size and type of HAI outbreak for health departments and CDC</li> <li>ii. Establish mechanisms or protocols for exchanging information about outbreaks or breaches among state and local governmental partners (e.g., State Survey agencies, Communicable Disease Control, state licensing boards)</li> </ul>	
			<i>Other activities or descriptions (not required):</i> <b>This should be part of the HAI communication plan (see section 4).</b> <b>Not funded for Level II activities.</b>	
	<input type="checkbox"/>  <input type="checkbox"/>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	4. Identify at least 2 priority prevention targets for surveillance in support of the HHS HAI Action Plan <ul style="list-style-type: none"> <li>i. <b>Central Line-associated Bloodstream Infections (CLABSI) (1)</b></li> <li>ii. <b>Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) Infections (1)</b></li> </ul> <i>Other activities or descriptions (not required):</i> <ul style="list-style-type: none"> <li>iii. <b>SSIs in ASCs</b></li> <li>iv. <b>SSIs in hospitals</b></li> <li>v. <b>NHSN AUR module</b></li> </ul>	<b>June 1, 2010</b>  <b>June 1, 2010</b>  <b>Oct. 1, 2010</b> <b>July 1, 2011</b> <b>Jan 1, 2011</b>

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)				Target Dates for Implementation
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Adopt national standards for data and technology to track HAIs (e.g., NHSN).  <p style="text-align: center;"><b>i. Develop metrics to measure progress towards national goals (align with targeted state goals). (See Appendix 1).</b></p>				
			<b>Metric Number and Label</b>	<b>Metric</b>	<b>Measurement System</b>	<b>State 2-Year Prevention Target</b>	
			CLABSI 1	CLABSIs per 1000 device days by ICU and other locations	CDC NHSN; Administrative discharge data <sup>1</sup>	Reduce the CLABSI SIR by at least 25% from baseline or to zero in ICU and other locations.	
			MRSA 1	Incidence rate (number per 100,000 persons) of invasive MRSA infections	CDC EIP/ABCs	25% reduction in incidence rate of all healthcare-associated invasive MRSA infections	
			SSI (ASCs)	Adherence to SCIP/NQF	CMS SCIP	At least 95% adherence to process measures to prevent surgical site infections.	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)				Target Dates for Implementation
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SSI (hosp)	infection process measures Deep incision & organ space infection rates using NHSN definitions (SCIP procedures)	CDC NHSN Procedure Associated Module	Reduce the admission and readmission SSI SIR by at least 25% or to zero.	
			<b>ii. Establish baseline measurements for prevention targets</b>				
			<i>Other activities or descriptions (not required):</i>  <b>CLABSIs TBD</b>  <b>Invasive MRSA TBD</b>  <b>SSIs (ASCs) TBD by CMS</b>  <b>SSIs (hospitals) TBD</b>  <b>Antibiotic stewardship TBD</b>				<b>June 1, 2010</b>  <b>June 1, 2010</b>  <b>Oct 2010</b>  <b>July 2011</b>  <b>Jan 2011</b>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Develop state surveillance training competencies i. Conduct local training for appropriate use of surveillance systems (e.g., NHSN) including				

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			facility and group enrollment, data collection, management, and analysis	
			<b>In addition to the mandatory CDC on line training that each NHSN facility will have to complete, the HAI Coordinator will arrange for optional web based or “train the trainer” or other appropriate training for all facilities required to utilize NHSN.</b>	<b>Feb 2010</b>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7. Develop tailored reports of data analyses for state or region prepared by state personnel	
			<b>NHSN specific reports will be developed by the QI Unit Health Program Analyst. In addition to reports currently being developed, sentinel events and surveyor and other data will be used to develop facility specific reports, hospitals and ASCs initially.</b>	<b>January 2011</b>
<b>Level III</b>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/>	8. Validate data entered into HAI surveillance (e.g., through healthcare records review, parallel database comparison) to measure accuracy and reliability of HAI data collection <ul style="list-style-type: none"> <li>i. Develop a validation plan</li> <li>ii. Pilot test validation methods in a sample of healthcare facilities</li> <li>iii. Modify validation plan and methods in accordance with findings from pilot project</li> <li>iv. Implement validation plan and methods in all healthcare facilities participating in HAI surveillance</li> <li>v. Analyze and report validation findings</li> <li>vi. Use validation findings to provide operational guidance for healthcare facilities that targets any data shortcomings detected</li> </ul>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<b>There is no funding for level III activities.</b>	
	☒	☐	9. Develop preparedness plans for improved response to HAI <ul style="list-style-type: none"> <li>i. Define processes and tiered response criteria to handle increased reports of serious infection control breaches (e.g., syringe reuse), suspect cases/clusters, and outbreaks</li> </ul>	
			<p><i>Other activities or descriptions (not required):</i></p> <p><b>Response to these reports is coordinated through the State Epidemiologist. Depending on the issue, the Office of Epidemiology and/or the BHCQC and/or the specific health district will respond.</b></p> <p><b>There are no funds for level III activities.</b></p>	
	☒	☐	10. Collaborate with professional licensing organizations to identify and investigate complaints related to provider infection control practice in non-hospital settings, and to set standards for continuing education and training	
			<b>The BHCQC currently engages professional licensing organizations as appropriate. In addition, the EPI Team within the QIU responds to surveyor findings and requests for IPC education, either from the healthcare facility or referral from surveyors. Surveyors investigate IPC complaints and involve the EPI Team when appropriate. Analysis of surveyor findings as well as EPI Team assessments is baseline for educational</b>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p><b>training.</b></p> <p><b>There are no funds for level III activities.</b></p>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>11. Adopt integration and interoperability standards for HAI information systems and data sources</p> <ul style="list-style-type: none"> <li>i. Improve overall use of surveillance data to identify and prevent HAI outbreaks or transmission in HC settings (e.g., hepatitis B, hepatitis C, multi-drug resistant organisms (MDRO), and other reportable HAIs) across the spectrum of inpatient and outpatient healthcare settings</li> <li>ii. Promote definitional alignment and data element standardization needed to link HAI data across the nation.</li> </ul>	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><b>i.Mentoring program has been established through the S NV APIC chapter and the Northern Nevada Infection Control network matching up newer IPs with experienced IPs.</b></p> <p><b>ii.NHSN data collection will begin June 1, 2010. Five separate modules (4 hospital, 1 ASC) will be implemented from June 2010 to July 2011.</b></p> <p><b>There are no funds for level III activities.</b></p>	
			<p>12. Enhance electronic reporting and information technology for healthcare facilities to reduce reporting burden and increase timeliness, efficiency, comprehensiveness, and reliability of the data</p>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Report HAI data to the public	
			<b><i>Other activities or descriptions (not required):</i></b> NHSN data collection (CLABSIs and invasive MRSA) data is expected to begin June 2010. Additional reports will be compiled based on surveyors' data, EPI Team data and the electronic Nevada Healthcare Database.	<b>January 2011</b>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Make available risk-adjusted HAI data that enables state agencies to make comparisons between hospitals.	
			<b>NHSN data will be risk adjusted and compiled for accurate hospital and ASC comparison.</b>	<b>January 2011</b>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	14. Enhance surveillance and detection of HAIs in nonhospital settings	
			<p><b>The BHCQC surveyors and EPI Team continue their surveillance and assessments in all health care facility types regulated by the BHCQC. IPC survey data is collected much more in depth than required by the survey tool. This includes ASCs, dialysis units, dependent care facilities, home health, SNFs. In addition to the usual survey documentation and data entry, the IPC data is entered and analyzed separately by the QI Unit.</b></p> <p><b>By 2011, NHSN will be expanded to non-hospital facilities. The</b></p>	<b>Oct 2011</b>

<b>Planning Level</b>	<b>Check Items Underway</b>	<b>Check Items Planned</b>	<b>Items Planned for Implementation (or currently underway)</b>	<b>Target Dates for Implementation</b>
			<b>HAI coordinator will develop educational trainings to help providers and surveyors detect HAI's in non-hospital settings. This will especially apply to doctor's offices that perform conscious sedation, deep sedation or general anesthesia.</b>	
Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.				

### 3. Prevention

State implementation of HHS Healthcare Infection Control Practices Advisory Committee (HICPAC) recommendations is a critical step towards the elimination of HAIs. CDC with HICPAC has developed evidence-based HAI prevention guidelines cited in the HHS Action Plan for implementation. These guidelines are translated into practice and implemented by multiple groups in hospital settings for the prevention of HAIs. CDC guidelines have also served as the basis the Centers for Medicare and Medicaid Services (CMS) Surgical Care Improvement Project. These evidence-based recommendations have also been incorporated into Joint Commission standards for accreditation of U.S. hospitals and have been endorsed by the National Quality Forum. Please select areas for development or enhancement of state HAI prevention efforts.

**Table 3:** State planning for HAI prevention activities

<b>Planning Level</b>	<b>Check Items Underway</b>	<b>Check Items Planned</b>	<b>Items Planned for Implementation (or currently underway)</b>	<b>Target Dates for Implementation</b>
<b>Level I</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Implement HICPAC recommendations. <ul style="list-style-type: none"> <li>i. Develop strategies for implementation of HICPAC recommendations for at least 2 prevention targets specified by the state multidisciplinary group.</li> </ul>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p>Since The Joint Commission (TJC) accredited organizations must already meet these criteria (in addressing National Patient Safety Goal #7), means will be developed to determine that these criteria are being met. The HAI coordinator will consult with the IPs in TJC accredited organizations to determine how NPSG # 7 is being met.</p> <p>In addition, consider additional strategies for non-TJC organizations (facility specific). Will consider use of intended dates for NHSN implementation through 2012.</p>	June 2010
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>2. Establish prevention working group under the state HAI advisory council to coordinate state HAI collaboratives</p> <p>i. Assemble expertise to consult, advise, and coach inpatient healthcare facilities involved in HAI prevention collaboratives</p>	
			<p><i>Other activities or descriptions (not required):</i></p> <p>We are currently in conversation with the Nevada Hospital Association regarding the “On the CUSP: Stop BSI” program to determine whether or not Nevada hospitals will become involved. See number 3 below.</p>	March 2010
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>3. Establish HAI collaboratives with at least 10 hospitals (i.e. this may require a multi-state or regional collaborative in low population density regions)</p> <p>i. Identify staff trained in project coordination, infection control, and collaborative coordination</p>	See below
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>ii. Develop a communication strategy to facilitate peer-to-peer learning and sharing of</p>	See below

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p style="text-align: right;">best practices</p> <p>iii. Establish and adhere to feedback of a clear and standardized outcome data to track progress</p>	<b>See below</b>
			<p><i>Other activities or descriptions (not required):</i></p> <p><b>There is no funding provided for HAI collaboratives. A prevention working group will be considered in the future, including a survey of Nevada facilities to see if there is an interest in experts coming together to form an HAI prevention collaborative (i.e. addressing CLABSIs thru “On the CUSP: Stop BSI” will be the first to be considered – Nevada Hospital Association will head this effort).</b></p> <p><b>Continue and further develop IPC mentoring – experienced IPs partnering with lesser experienced IPs. Hospitals, ASCs, LTACs, SNFs etc.</b></p>	<b>March 2010</b>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>4. Develop state HAI prevention training competencies</p> <p>i. Consider establishing requirements for education and training of healthcare professionals in HAI prevention (e.g., certification requirements, public education campaigns and targeted provider education) or work with healthcare partners to establish best practices for training and certification</p>	
			<p><b>The EPI Team currently approaches individual facility types to support them with their IPC program. Following interview, observation and verbal recommendations, the IP follows up with</b></p>	

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p>written recommendations and another visit 6-8 weeks later. Depending on findings and needs, future visits are planned. During these interactions, information and educational resources are provided – APIC, APIC chapter or NNIC, EPI 101, EPI 201, other trainings out of state. In July 2009 we held our first statewide HAI conference.</p> <p>Competency tool and/or training resources to be developed</p> <p>Second annual statewide HAI meeting – focus to be determined.</p>	<p>December 2010</p> <p>August 2010</p>
Level II	☒	☒	<p>5. Implement strategies for compliance to promote adherence to HICPAC recommendations</p> <p style="padding-left: 40px;">i. Consider developing statutory or regulatory standards for healthcare infection control and prevention or work with healthcare partners to establish best practices to ensure adherence</p> <p><i>Priority Module 1 – Recommendations for Aseptic Insertion of Vascular Catheters</i></p> <p><b>Related HICPAC Recommendations:</b></p> <ul style="list-style-type: none"> <li>• <b>HICPAC Rec.: Maintain aseptic technique during insertion and care of intravascular catheters (Category 1A)</b></li> <li>• <b>HICPAC Rec.: Use aseptic technique including the use of a cap, mask, sterile gown, sterile gloves, and a large sterile drape, for the insertion of central venous catheters</b></li> </ul>	July 2010

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
			<p>(CVC),including for peripherally inserted central catheters (PICC) and guide wire exchange (Category 1A)</p> <ul style="list-style-type: none"> <li>• HICPAC Rec.: Apply an appropriate antiseptic to the insertion site on the skin before catheter insertion and during dressing changes (Category 1A)</li> <li>• HICPAC Rec.: Although a 2% chlorhexidine-based preparation is preferred, tincture of iodine, an iodophor, or 70% alcohol can be used (Category 1A)</li> <li>• HICPAC Rec.: Select the catheter, insertion technique, and insertion site with the lowest risk for complications (infectious and noninfectious) for the anticipated type and duration of IV therapy (Category 1A)</li> <li>• HICPAC Rec.: Use a subclavian site (rather than a jugular or a femoral site) in adult patients to minimize infection risk for non-tunneled CVC placement (Category 1A)</li> <li>• HICPAC Rec.: Weigh the risk and benefits of placing a device at a recommended site to reduce infectious complications against the risk for mechanical complications (e.g., pneumothorax, subclavian artery puncture, subclavian vein laceration, subclavian vein stenosis, hemothorax, thrombosis, air embolism, and catheter misplacement) (Category 1A)</li> </ul> <p><i>Priority Module 2 – Recommendations for Appropriate Maintenance of Vascular Catheters</i>  <b>Related HICPAC Recommendations:</b></p> <ul style="list-style-type: none"> <li>• HICPAC Rec.: Use either sterile gauze or sterile, transparent, semi-permeable dressing to cover the</li> </ul>	



Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p><b>consultation. In addition, surveyors use a specific infection control tool during surveys. This tool will be improved upon as needed and facility specific tools will be developed for surveyor use.</b></p> <p>iv. Consider expanding regulation and oversight activities to currently unregulated settings where healthcare is delivered or work with healthcare partners to establish best practices to ensure adherence - <b>2009 legislation (AB 123) passed to address infection control in physician offices that carry out certain types of anesthesia</b></p>	
			<p><b>All facilities providing procedures are strongly encouraged to be accredited by an accrediting organization (TJC, CMS, AAAHC, etc).</b></p> <p><b>According to Nevada state legislation (AB 123), ASCs and certain doctor's offices must be accredited by March 31, 2010.</b></p> <p><b>Nevada was chosen to be a pilot state for the Safe Injection Practices program.</b></p>	<p><b>March 31, 2010</b></p> <p><b>March 31, 2010</b></p> <p><b>June 30, 2010</b></p>
	<input type="checkbox"/>	<input type="checkbox"/>	<p>6. Enhance prevention infrastructure by increasing joint collaboratives with at least 20 hospitals (i.e. this may require a multi-state or regional collaborative in low population density regions)</p>	
			<b>No funding is available for this activity level.</b>	<b>None</b>

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	<input type="checkbox"/>	<input type="checkbox"/>	7. Establish collaborative to prevent HAIs in nonhospital settings (e.g., long term care, dialysis)	
			<b>No funding is available for this activity level.</b>	<b>None</b>
Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.				

#### 4. Evaluation and Communications

Program evaluation is an essential organizational practice in public health. Continuous evaluation and communication of practice findings integrates science as a basis for decision-making and action for the prevention of HAIs. Evaluation and communication allows for learning and ongoing improvement to occur. Routine, practical evaluations can inform strategies for the prevention and control of HAIs. Please select areas for development or enhancement of state HAI prevention efforts.

**Table 4:** State HAI communication and evaluation planning

Planning Level	Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Level I	<input type="checkbox"/>  <input type="checkbox"/>	<input checked="" type="checkbox"/>  <input checked="" type="checkbox"/>	1. Conduct needs assessment and/or evaluation of the state HAI program to learn how to increase impact <ul style="list-style-type: none"> <li>i. Establish evaluation activity to measure progress towards targets and</li> <li>ii. Establish systems for refining approaches based on data gathered</li> </ul>	
			<b>Statewide survey to be conducted by HAI coordinator with input from HAI advisory committee/working group.</b>	<b>April 2010</b>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Develop and implement a communication plan about the state’s HAI program and progress to meet public and private stakeholders needs <ul style="list-style-type: none"> <li>i. Disseminate state priorities for HAI prevention to healthcare organizations, professional provider organizations, governmental agencies, non-profit public health organizations, and the public</li> </ul>	
			<b>HAI coordinator will set future dates/communications for advisory group and separate working group to develop a communication plan.</b>  <b>Get the media and schools involved – ALL public health districts (ex. safe kid’s coalition, university public health programs, family services programs, NSHD emergency</b>	<b>April 2010</b>  <b>August 2010</b>

			<b>preparedness, and AAA baseball teams in LV and Reno etc.)</b>	
<b>Level II</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3. Provide consumers access to useful healthcare quality measures	
			<p><b>Multiple reports currently available at <a href="http://www.health.nv.gov">http://www.health.nv.gov</a> on the Nevada interactive data base site.</b></p> <p><b>HAI findings, facility specific will be compiled for 2009. Sentinel event reports will also be compiled.</b></p> <p><b>Develop NSHD HAI website for both professionals and the public.</b></p> <p><b>NHSN specific reports will be available for 2010.</b></p>	<p><b>March 2010</b></p> <p><b>October 2010</b></p> <p><b>January 2011</b></p>
<b>Level III</b>	<input type="checkbox"/>	<input type="checkbox"/>	4. Identify priorities and provide input to partners to help guide patient safety initiatives and research aimed at reducing HAIs	
			<b>No funding available for this level of activity.</b>	
Please also describe any additional activities, not listed above, that your state plans to undertake. Please include target dates for any new activities.				