

2012 West Virginia Healthcare Associated Infection Prevention Plan

West Virginia Healthcare Associated Infection Advisory Group Membership

Anita Barnhouse	Dee Bixler, MD, MPH	Mary Blank, MPH, CIC, CPHQ
Program Manager II	Director of Division of Infectious Disease	Manager, Hospital Performance Management
Office of Health Facility Licensure and Certification	Epidemiology	Highmark Inc.
408 Leon Sullivan Way	West Virginia Bureau for Public Health	120 Fifth Avenue Place Suite 893
Charleston, WV 25301	350 Capitol St. Rm. 125	Pittsburgh, PA 15222
Email: anita.L.barnhouse@wv.gov	Charleston, WV 25301	mary.blank@highmark.com
Phone: (304)-558-0050	Email: dee.bixler@wv.gov	Work Phone: (412) 544-5194
FAX: (304)-558-2515	Phone: (304)-558-5358	Fax: (412) 544-8735
http://www.wvdhhr.org/ohflac	Fax: (304)-558-6335	www.highmark.com
incept// www.incept/ childe	www.dide.wv.gov	
	www.aiac.wv.gov	
Christi Clark	Becky Cochran, MSN, RN, CPHQ	Patti Connelly, RN, MS
Microbiology Supervisor	Healthcare Quality Improvement Program	Lead Project Coordinator
Office of Laboratory Services	Director	West Virginia Medical Institute
167 Eleventh Avenue	West Virginia Medical Institute	3001 Chesterfield Place
South Charleston, WV 25303	3001 Chesterfield Place	Charleston, WV 25304
christi.d.clark@wv.gov	Charleston, WV 25304	Email: pconnelly@wvmi.org
304-558-3530	Email: bcochran2@wvmi.org	Phone: (304)-346-9864
304-558-2006	Phone: (304)-346-9864	FAX: (304)-347-8663
http://www.wvdhhr.org/labservices/	FAX: (304)-347-8663	http://www.wvmi.org/
	http://www.wvmi.org/corp	



Department of Health & Human Resources			
Janet Crigler, MT(ASCP), CIC	L Scott Dean, PhD, MBA	Dianne DeAngelis, RN, ICP, CIC	
Infection Preventionist	Senior Biostatistician	Infection Preventionist	
Fairmont General Hospital	Charleston Area Medical Center	West Virginia University Hospital	
1325 Locust Avenue	Health Education and Research Institute	1 Medical Center Drive	
Fairmont, WV 26554	3211 MacCorkle Ave	Morgantown, WV 26505	
Email: jcrigler@fghi.com	Charleston, WV 25314	Email: deangelisd@wvuh.com	
Phone: (304)-367-7373	Email: scott.dean@camc.org	Phone: (304)-589-4305	
FAX: 304-367-7503	Phone: (304)-388-9916	FAX: 304-598-6353	
http://www.fghi.com	FAX: (304)-388-9929	http://www.wvuh.com	
	http://camcinstitute.org		
Maria del Rosario, MD, MPH	Beth Divelbiss	Deborah J. Donovan, MLLS, RHIA, CPHQ	
Director of Surveillance	Director of Clinical Services	Director, Provider and Hospital Performance	
Division of Infectious Disease Epidemiology	West Virginia Healthcare Association	Management	
WV Bureau for Public Health	110 Association Dr.	Highmark Inc.	
350 Capitol St. Rm. 125	Charleston, WV 25311	120 Fifth Avenue Place Suite 893	
Charleston, WV 25301	Email: dadkins@wvhca.org	Pittsburgh, PA 15222	
Email: maria.c.delrosario@wv.gov	Phone: (304)-346-4575	Email: deborah.donovan@highmark.com	
Phone: (304)-558-5358	FAX: (304)-342-0519	Work Phone: (412) 544-8722	
FAX: (304)-558-6335	www.wvhca.org	Fax: (412) 544-8735	
http://www.dide.wv.gov	www.wvnca.org	http://www.highmark.com	
http://www.dide.wv.gov		nttp.//www.mgmmark.com	



Barbara Eckerd	Melanie Fisher, MD, Professor & Director	Sharon Gaston, RN, BSN, MPH, CIC
Associate Director	of Global Health Program	Infection Preventionist
Office of Laboratory Services	School of Medicine, West Virginia	
167 Eleventh Avenue	University	Braxton County Memorial Hospital
South Charleston, WV 25303	Infectious Diseases	100 Hoylman Drive
barbara.m.eckerd@wv.gov	P.O. Box 9163	Gassaway, WV 26624
304-558-3530	2nd Floor HSC North - Room 2181	sharon.gaston@braxtonmemorial.org
304-558-2006	Morgantown, WV 26506	(304)364-1094
http://www.wvdhhr.org/labservices/	mfisher@hsc.wvu.edu	(304)364-5809
	304-293-3306	http://www.braxtonmemorial.org/
	304-293-8677	
	http://medicine.hsc.wvu.edu/medicine/Inf	
	ectious-Diseases/Home	
Brooks Gainer, II, MD, FACP, FIDSA, FSHEA	Victoria (Vickie) Greenfield, RN, BSN	Rahul Gupta, MD, MPH
Clinical Associate Professor	Public Health Nurse Director	Executive Director/Health Officer
Section of Infectious Disease, School of Medicine, West	Berkeley County Health Department	Kanawha Charleston Health Department
Virginia University	800 Emmett Rousch Drive	108 Lee St., East
Infectious Disease Society of America (IDSA) Liason for	Martinsburg, WV 25401	Charleston, WV 25301
WV	Email: Vickie.s.greenfield@wv.gov	Email: rahul.gupta@wv.gov
725 Bakers Ridge Rd.	Phone: (304)-263-5131	Phone: (304)-348-6494
Morgantown, WV 26508	FAX: (304)-263-1067	FAX: (304)-348-6821
grbgainer@aol.com	http://www.bchealthdept.org/	http://www.kchdwv.org/
304-685-6660		
304-599-2757		



Department of Health & Human Resources		
Loretta Haddy, PhD, MS, MA	Sherif Ibrahim, MD, MPH	Rashida A. Khakoo, MD, MACP
State Epidemiologist/Director	Outbreak Epidemiologist/Regional	Professor & Section Chief, Infectious Diseases
Office of Epidemiology and Prevention Services	Epidemiologist Liaison	School of Medicine, West Virginia University
WV Bureau for Public Health	Division of Infectious Disease Epidemiology	Infectious Diseases
350 Capitol St. Rm. 125	WV Bureau for Public Health	P.O. Box 9163
Charleston, WV 25301	350 Capitol St. Rm. 125	2nd Floor HSC North - Room 2181
Email: <u>loretta.e.haddy@wv.gov</u>	Charleston, WV 25301	Morgantown, WV 26506
Phone: (304)-558-5358	Email: sherif.m.ibrahim@wv.gov	Email: rkhakoo@hsc.wvu.edu
FAX: (304)-558-6335	Phone: (304)-558-5358	Phone: (304)-293-3306
http://www.dhhr.wv.gov/oeps/Pages/default.aspx	FAX: (304)-558-6335	FAX: (304)-293-8677
	http://www.dide.wv.gov	http://www.hsc.wvu.edu/som/medicine/Infectiou
		<u>sDiseases</u>
April Kilgore, MD	Jim Kranz	Terrie Lee, RN, MS, MPH, CIC
Assistant Professor, Department of Pediatrics	Vice President for Professional Activities	Director of Epidemiology
Joan C. Edwards School of Medicine	WV Hospital Association	Charleston Area Medical Center
Marshall University	100 Association Drive	3200 MacCorkle Avenue SE
1600 Medical Center Drive, Suite 3500	Charleston, WV 25311	Charleston, WV 25304
Huntington, WV 25701	Email: Jim.Kranz@wvha.org	Email: terrie.lee@camc.org
Email: kilgore8@marshall.edu	Phone: (304)-344-9744	Phone: (304)-388-4259
Phone: (304) 691-1356	FAX: (304)-344-9745	FAX: (304)-388-8822
Pager: (304) 526-3184	http://www.wvha.com	http://www.camc.org
http://www.marshallmedcenter.org/pediatrics/infectio		
usdisease/		



Department of Health & Human Resources		
Maria Guadalupe Lopez Marti, MD	Linda Minnich, MS, SM(AAM), SM(ASCP)	Kathryn S. Moffett, MD, FAAP
Asst. Professor, Pediatric Infectious Diseases	Virology Supervisor	Associate Professor of Pediatrics
Joan C. Edwards School of Medicine	CAMC Memorial-Charleston	Division Chief, Pediatric Infectious Diseases
Marshall University	3200 MacCorkle Ave SE	Director, Mountain State Cystic Fibrosis Center
1600 Medical Center Drive	Charleston, WV 25304	Co-Clerkship Director, Pediatrics
Suite 3500, Office 3582	Email: linda.minnich@camc.org	West Virginia University
Huntington, WV 25701	Phone: 304-388-9356	HSC-9214
Email: lopezmarti@marshall.edu	FAX: (304)-388-9637	Morgantown, WV 26506-9214
Pager: (304) 526-3228	http://www.camc.org	Email:kmoffett@hsc.wvu.edu
Office: (304) 691-8679		Phone: (304)-293-1201
FAX: (304) 691-1375		FAX: (304)-293-1216
http://www.marshallmedcenter.org/pediatrics/infectio		http://www.hsc.wvu.edu/som/
<u>usdisease/</u>		
Thomas C Rushton, MD, FACP, FIDSA, FSHEA	Thein Shwe, MPH, MS, MBBS	Christine Teague, PharmD, MPH, AAHIVE
Professor of Medicine, Chief, Section of Infectious	Healthcare Associated Infection	Program Director/Co-Director CAMC's
Diseases	Coordinator	Antimicrobial Stewardship Program
Marshall University School of Medicine	Division of Infectious Disease Epidemiology	Charleston Area Medical Center
1249 15th St. Ste. 300	WV Bureau for Public Health	3200 MacCorkle Avenue SE
Huntington, WV 25701	350 Capitol St. Rm. 125	Charleston, WV 25304
Email: rushton@marshall.edu	Charleston, WV 25301	christine.teague@camc.org
Phone: (304)-691-1095	Email: thein.shwe@wv.gov	(304) 388-8106 (304) 388-8238
FAX: (304)-691-1065	Phone: (304)-558-5358	http://www.camc.org/
http://musom.marshall.edu/medctr/med/physicians/ru	FAX: (304)-558-6335	
<u>shton.asp</u>	http://www.dide.wv.gov	



Jessica Toth, MSPH Epidemiologist West Virginia Health Care Authority	Amy Wenmoth, MA West Virginia Health Care Authority 100 Dee Drive	Bonnie Woodrum, RN, MSN, CIC Infectious Disease, Threat Preparedness Randolph-Elkins Health Department
100 Dee Drive	Charleston, WV 25311	32 Randolph Avenue
Charleston, WV 25311 Email: jtoth@hcawv.org	Email: awenmoth@hcawv.org Phone: (304)-558-7000	Elkins, WV 26241 Email: bonnie.b.woodrum@wv.gov
Phone: (304)-558-7000	FAX: (304)-558-7001	Phone: (304)-636-0396
FAX: (304)-558-7001 http://www.hcawv.org	http://www.hcawv.org	FAX: (304)-637-5901 http://www.wvdhhr.org
Phil Wright	Marilyn Zimmerman SM(ASCP)BS	
President & CEO The Health Plan	CAMC Microbiology Section Supervisor 3200 MacCorkle Ave SE	
51260 National Rd. E	Phone 304-388-5513	
St. Clairsville, OH 43950	Marilyn.zimmerman@camc.org	
Email: PhilW@healthplan.org	http://www.camc.org/	
Phone: (740)695-7625 FAX: (740)-695-8103		
http://www.healthplan.org		



West Virginia Healthcare Associated Infections (HAI) Plan

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

Items	Items		
Underway	Planned	Items Planned for Implementation (or currently underway)	Target Dates
X		Maintain statewide HAI prevention leadership through the formation of multidisciplinary group or state HAI advisory council	Ongoing
	X	ii. Identify specific HAI prevention targets consistent with HHS priorities	Achieved

Status and Narrative Plan: The state of West Virginia has an active state HAI Advisory Group. The stated responsibilities of the HAI advisory group are:

- 1. Offer input into the state HAI plan for West Virginia.
- 2. Advise on selection of HAI prevention targets most relevant to our state.
- 3. Primarily represent the interests of patients and families throughout the state.
- 4. Secondarily, represent the interests of relevant professional and trade organizations.
- 5. Communicate about the planning process with stakeholders of member organizations.
- 6. Advise on appropriate prevention goals and objectives for statewide planning.
- 7. Advise on appropriate evidence-based interventions to prevent and control HAIs.

Over time, as issues related to healthcare associated infections change, membership of the multidisciplinary group will also change. On an annual basis, membership will be reviewed and updated in collaboration with the multidisciplinary group and the current membership list will be posted (www.dide.wv.gov) with this plan. The old plan and old list will be archived at that website. For some issues, planning may be conducted by subcommittees of this group.

The West Virginia Health Care Authority (West Virginia HCA) has implemented its legal mandate (See:



http://www.hcawv.org/Infect/InfectHome.htm) to collect healthcare associated infections data through the National Healthcare Safety Network (NHSN). West Virginia HCA carries out its mission with the advice of an Infection Control Advisory Panel (ICAP) (See: http://www.hcawv.org/Infect/PanelListing.pdf) The composition of this panel is specified in state code and the panel must participate in decisions regarding collection of hospital data for public reporting. Beginning July 1, 2009, hospitals were required to report central line associated bloodstream infections (CLABSIs) data through NHSN. Also beginning in 2009, hospitals were required to report aggregate information on seasonal healthcare worker influenza immunization to West Virginia HCA. Effective January 1, 2012, hospitals were required to report CLABSIs, catheter associated urinary tract infections (CAUTIs), and surgical site infections (SSIs) after colon surgery and abdominal hysterectomy through NHSN. Under state law, this data will eventually be made public in a process to be determined by West Virginia HCA with guidance from the ICAP.

Objective 1.1: On at least an annual basis, the West Virginia Bureau for Public Health will evaluate membership of the HAI Advisory Group so that membership can appropriately address existing and emerging HAIs.

Date Due	1.1 Evaluation Measure	Person Responsible	
December 31,	Membership list is posted in the State HAI Plan at	Thein Shwe, MPH, MS, State HAI	
annually	www.dide.wv.gov	Coordinator;	
		with input from the state HAI	
		Advisory Group,	
		Bureau for Public Health	

Items	Items		
Underway	Planned	Items Planned for Implementation (or currently underway)	Target Dates
		2. Establish an HAI surveillance prevention and control program	
Χ		i. Designate a State HAI Prevention Coordinator	Achieved
		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)

Status and Narrative Plan: Their Shwe continues working as the State HAI Coordinator since December 1, 2010. The position is currently funded with CDC Epidemiology and Laboratory Capacity (ELC) funding.

Funding was requested but was not awarded from CDC to conduct some HAI activities such as data validation, antibiotic stewardship education, and laboratory testing for multidrug resistant organisms outbreaks. As staffing needs are identified, funding may be sought through grant opportunities and/or state appropriations.

Objective 1.2. On an ongoing basis, the Bureau for Public Health shall maintain the State HAI Prevention Coordinator position.

Date Due	1.2 Evaluation Measure	Person Responsible	
Ongoing	State HAI Coordinator is employed by BPH	Loretta Haddy, State Epidemiologist	
		Danae Bixler, Director, Infectious	
		Disease Epidemiology	
		Bureau for Public Health	

Objective 1.3: On an annual basis by July 1, staffing needs shall be assessed by the HAI Coordinator and the Director of the Division of Infectious Disease Epidemiology. Staffing needs shall be noted in this plan by December 31.

Date Due	1.3 Evaluation Measure	Person Responsible	
December 31,	Assessment of staffing needs completed and noted in Director of Infectious Disease		
annually	this plan.	Epidemiology, Healthcare	
	Associated Infections Coordinat		
		Bureau for Public Health	



Items	Items		
Underway	Planned	Items Planned for Implementation (or currently underway)	Target Dates
	Х	 Integrate laboratory activities with HAI surveillance, prevention and control efforts. 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) 	To be determined

Status and Narrative Plan: West Virginia has limited capacity at the Office of Laboratory Services for assessing resistance in HAI pathogens or performing typing where appropriate. Funding was requested from CDC for this objective but was not awarded. BPH will try to allocate other funding to achieve this objective. Stakeholders to participate in planning should include representatives from the Office of Laboratory Services, university microbiology departments, Association of Professionals in Infection Control, and hospital epidemiologists. The West Virginia Office of Laboratory Services (OLS) has submitted a purchase request for bioMerieux Diversilab equipment for molecular typing for strain identification to assist with MDRO outbreak investigation. A proposal to expand laboratory capacity will be developed for review by the HAI advisory group during 2012. A funding request has been submitted to obtain bioMerieux Vitek2 equipment for susceptibility testing for MDROs.

Objective 1.4: By December 31, 2012, a plan for laboratory infrastructure developed will be prepared.

Date Due	1.4 Evaluation Measure	Person Responsible	
December 31,	A plan for laboratory infrastructure is developed.	HAI Coordinator and Director of	
2012		DIDE	
		Microbiology supervisor and	
		Associate Director of Office of	
		Laboratory Services	

Objective 1.5: By December 31, 2013, the HAI Coordinator shall have developed a plan for laboratory support for healthcare associated infections and incorporated elements of the laboratory plan into this plan.

Date Due 1.5 Evaluation Measure Person Responsible
--



December 31,	This HAI plan addresses the state laboratory plan	HAI Coordinator
2013		

Items	Items		
Underway	Planned	Items Planned for Implementation (or currently underway)	Target Dates
Х		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)	Achieved

Status and Narrative Plan: Effective with hire of the HAI Coordinator, DIDE has initiated contact with representatives of the Office of Health Facility Licensure and Certification, the Board of Medicine (covers physicians and podiatrists), the Board of Osteopathy, the Board of Dental Examiners, Board of Pharmacy, and the Board of Examiners for Registered Professional Nurses to formulate an agreement for coordination of outbreak investigations and infection control breaches. A written memorandum documented the agreement is posted to www.dide.wv.gov.

Items	Items		
Underway	Planned	Items Planned for Implementation (or currently underway)	Target Dates
		5. Facilitate use of standards-based formats (e.g., Clinical Document	To be determined
		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	



of Health & Human Resources		
	health agencies using electronic laboratory reporting (ELR). Facilitating use	
	of standards-based solutions for external reporting also can strengthen	
	relationships between healthcare facilities and regional nodes of healthcare	
	information, such as Regional Health Information Organizations. (RHIOs)	
	and Health Information Exchanges (HIEs). These relationships, in turn, can	
	yield broader benefits for public health by consolidating electronic reporting	
	through regional nodes.	

Status and Narrative Plan: Consensus opinion of the Advisory Group is that this is an extremely important activity for maximizing efficiency of personnel resources in hospitals; however West Virginia does not have enough infrastructures in place to initiate planning towards this activity at this time. This issue will be revisited on an annual basis to determine if planning can proceed.

Objective 1.6: On an annual basis by December 31, the Health Care Authority shall re-evaluate feasibility of planning towards electronic reporting.

Date Due	1.6 Evaluation Measure	Person Responsible
December 31,	Feasibility of planning toward electronic reporting is	Health Care Authority
annually	addressed in the State HAI plan	

Status and Narrative Plan: There is no infrastructure to implement this objective at this time.



2. Surveillance, Detection, Reporting, and Response

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

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		Improve HAI outbreak detection and investigation	
	Х	 i. Work with partners including CSTE, CDC, state legislatures, and providers across the healthcare continuum to improve outbreak reporting to state health departments 	July 1, 2013
	Х	ii. Establish protocols and provide training for health department staff to investigate outbreaks, clusters or unusual cases of HAIs.	July 1, 2013
	Х	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	July 1, 2013
	X	iv. 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)	Ongoing

Status and Narrative Plan: West Virginia's reportable disease rule requires reporting of community outbreaks immediately. While reporting of healthcare associated outbreaks is not explicitly required, nursing home outbreaks are frequently reported to Infectious Disease Epidemiology. State epidemiologists have gained increasing experience and training in investigation of healthcare associated infections.

During 2012, ongoing efforts to train all staff who conduct outbreak investigations will continue. In 2012, 2 staff will complete the Society of Healthcare Epidemiology of America (SHEA) training. Two staff have completed a one-month rotation at Charleston Area Medical Center (CAMC) Infection Control Program to learn more about hospital infection control.

During 2012, planning for revision of the reportable disease rule to include healthcare associated outbreaks in the list of reportable



conditions will begin. Proposed rule changes must usually be submitted internally by June 15 of each year for submission to the state legislature by January of the following year. Proposed language will be drafted in the early part of 2012 and submitted for public comment according to the usual state deadlines. If passed by the state legislature, the provision would become law in 2013. Language in the rule to protect confidentiality is already quite strong. The Advisory Group was consulted about draft language in the reportable disease rule in January 2012.

As this process unfolds, outbreaks will continue to be recorded in the annual outbreak report posted at: http://www.wvidep.org/AZIndexofInfectiousDiseases/OutbreaksorClustersofAnyIllness/tabid/1535/Default.aspx.
Beginning with the 2009 report, healthcare associated outbreaks have been specifically tracked to document changes in reporting of healthcare associated outbreaks.

Objective 2.1: On an ongoing basis, all existing and newly hired epidemiology and nursing staff in DIDE shall receive training in infection control; and designated staff shall represent DIDE at the annual national SHEA and APIC conferences.

Date Due	2.1 Evaluation Measures	Person Responsible
Annually by	Additional DIDE nurses and epidemiologists shall	Loretta Haddy, State Epidemiologist
December 31,	have completed infection control training	Danae Bixler, Director, Infectious
	 Selected epidemiology and/or nursing staff shall attend local and national APIC and national SHEA 	Disease Epidemiology
	meetings.	Bureau for Public Health
	Selected epidemiologists are 'embedded' at	
	CAMC for training in hospital epidemiology.	

Objective 2.2: By June 15, 2012, the State Epidemiologist shall submit a proposed revision to the reportable disease rule, 64CSR7 requiring reporting of healthcare associated outbreaks, and specifying confidentiality protections for healthcare institutions during investigation.

Date Due	2.2 Evaluation Measure	Person Responsible
June 15, 2012	Proposed revision to 64CSR7 has been submitted to	Loretta Haddy, State Epidemiologist
	Legislative Services in the West Virginia Department	Bureau for Public Health
	of Health and Human Resources	



Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Х	Х	2. Enhance laboratory capacity for state and local detection and response to new and emerging HAI issues.	December 31, 2012

Status and Narrative Plan: Office of Laboratory Services (OLS) has submitted a purchase request for bioMerieux Diversilab equipment for molecular typing for strain identification to assist with MDRO outbreak investigation. When the equipment arrives at OLS, validation of performance will be conducted before actual testing and reporting can be accomplished. A proposal to expand laboratory capacity will be developed for review by the HAI advisory group during 2012. A funding request was also submitted to obtain bioMerieux Vitek2 equipment for susceptibility testing for MDROs.

Check Items	Check	Items Planned for Implementation (or currently underway)	Target Dates for
Underway	Items		Implementation
	Planned		
		3. Improve communication of HAI outbreaks and infection control breaches	
	Χ	i. Develop standard reporting criteria including, number, size	July 1, 2013
		and type of HAI outbreak for health departments and CDC	
	Χ	ii. Establish mechanisms or protocols for exchanging	Achieved
		information about outbreaks or breaches among state and	
		local governmental partners (e.g., State Survey agencies,	
		Communicable Disease Control, state licensing boards)	

Status and Narrative Plan: West Virginia has disease investigation protocols, including an outbreak protocol posted at: http://www.wvidep.org/WVReportableDiseaseManual/tabid/1435/Default.aspx Healthcare associated outbreak reporting and investigation guidelines will be drafted by the HAI Coordinator and outbreak epidemiologist, and then discussed with the Advisory Group before finalizing it. DIDE epidemiologists have developed outbreak tool kits for use by healthcare facilities, including Toolkits for influenza, norovirus, MDROs and Clostridium difficile infection (CDI).

Objective 2.3: By July 1, 2013, West Virginia shall include guidance for reporting and investigation of healthcare associated outbreaks



as part of the reportable disease protocol manual.

Date Due	2.3 Evaluation Measure	Person Responsible
July 1, 2013	Outbreak protocol is posted at www.wvidep.org for	HAI Coordinator
	healthcare associated outbreaks	Outbreak Epidemiologist
		Bureau for Public Health

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		4. Identify at least 2 priority prevention targets for surveillance in support of the HHS HAI Action Plan	To be determined
Х		i. Central Line-associated Bloodstream Infections (CLABSIs) ii. Clostridium difficile Infections (CDI)	July 1, 2009
X		iii. Catheter-associated Urinary Tract Infections (CAUTIs) iv. Methicillin-resistant Staphylococcus aureus (MRSA) Infections	January 1, 2012
Х		v. Surgical Site Infections (SSIs) vi. Ventilator-associated Pneumonia (VAP)	January 1, 2012

Status and Narrative Plan: West Virginia law requires that hospitals submit healthcare associated infections to the West Virginia Health Care Authority (HCAWV). The data to be submitted are determined by the West Virginia HAI Infection Control Advisory Panel. Since July 1, 2009, data on CLABSI in medical intensive care units, surgical intensive care units and medical-surgical intensive care units are reported through the National Healthcare Safety Network (NHSN). Under W. Va. Code §16-5F-1, the West Virginia HCA can collect data and make this data available to the public in a format to be determined by the Infection Control Advisory Panel (ICAP). Membership of the ICAP is specified by law and listed at http://www.hcawv.org/Infect/PanelListing.pdf.

Effective January 2012, HCAWV and the HAI Infection Control Advisory Panel determined to require reporting of CLABSI from all ICUs; CAUTIS from all adult and pediatric ICUs and medical, surgical, adult mixed acuity units in acute care and critical access hospitals that do not have an ICU; and SSIs from colon and abdominal hysterectomy surgical procedures to NHSN. Data collection has also been implemented for influenza immunization of healthcare workers in all hospitals in West Virginia since 2009. The HCAWV published the 2012 HAI Annual Report which contains data on healthcare personnel seasonal influenza vaccinations and the first public release of



West Virginia hospital-specific CLABSI data. It is posted on http://www.hcawv.org/Infect/HAIReport 2012.pdf.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		5. Adopt national standards for data and technology to track HAIs (e.g., NHSN).	
X		i. Develop metrics to measure progress towards national	
		goals (align with targeted state goals). (See Appendix 1).	
X		ii. Establish baseline measurements for prevention targets	Achieved

Status and Narrative Plan: West Virginia uses the National Healthcare Safety Network (NHSN) for tracking HAIs. Baseline data is available for CLABSI since July 2009 and it is included in the HCAWV HAI Annual Reports posted on http://www.hcawv.org/Infect.

eck Items nderway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	Х	6. Develop state surveillance training competencies i. Conduct local training for appropriate use of surveillance systems (e.g., NHSN) including facility and group enrollment, data collection, management, and analysis	to be determined

Status and Narrative Plan: Specific NHSN training needs will be evaluated be conducting a needs assessment survey to infection preventionists in 2012. Based on this evaluation, a training plan for hospitals will be developed by HCAWV.

Objective 2.4: Training for hospital staff using NHSN will be addressed in this plan by December 31, 2012.

Date Due		2.4 Evaluation Measure	Person Responsible	
December 3	1,	Training plan is developed by Health Care Authority	Health Care Authority WV	
2012				
Check Items	Check	Items Planned for Implementation (or currently	Items Planned for Implementation (or currently underway) Target	
Underway	Items Impl		Implementation	
	Planne	d		



X 7. Develop tailored reports of data analyses for state or region prepared by state personnel To be determined.

Status and Narrative Plan: The HCAWV publishes an annual report summarizing HAI surveillance data and is posted at http://www.hcawv.org/Infect/HAIReport 2012.pdf. The report is also distributed to the WV legislature and hospitals.

Check Items Underway	Check Items	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	Planned		
		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 i. Develop a validation plan ii. Pilot test validation methods in a sample of healthcare facilities iii. Modify validation plan and methods in accordance with findings from pilot project iv. Implement validation plan and methods in all healthcare facilities participating in HAI surveillance v. Analyze and report validation findings vi. Use validation findings to provide operational guidance for healthcare facilities that targets any data shortcomings detected	December 31, 2012

Status and Narrative Plan: A data validation plan will be developed by HCAWV.

Objective 2.5: By December 31, 2012, data validation plan will be addressed in this HAI plan.

Date Due	2.5 Evaluation Measure	Person Responsible
December 31, 2012	A CLABSI data validation plan will be developed and included in	WV Healthcare Authority
	this HAI plan.	

Status and Narrative Plan: A data validation plan will be developed by HCAWV.



Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Х		 9. Develop preparedness plans for improved response to HAI Define processes and tiered response criteria to handle increased reports of serious infection control breaches (e.g., syringe reuse), suspect cases/clusters, and outbreaks 	Achieved

Status and Narrative Plan: During 2009, West Virginia investigated two outbreaks in ambulatory care settings. Both outbreaks required notification of patients of possible exposure to blood-borne pathogens. As a result, West Virginia has accumulated examples of letters and websites used for patient notifications in a shared directory. In addition, West Virginia has adopted CDC guidelines for notification (see http://www.wvidep.org/AZIndexofInfectiousDiseases/InfectionControl/tabid/1783/Default.aspx)

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		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	Achieved

Status and Narrative Plan: The HAI Coordinator discussed management of infection control breaches with the West Virginia medical, osteopathic, dental and nursing Boards during 2011. A written memorandum documented the agreement is posted to www.dide.wv.gov.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
		 11. Adopt integration and interoperability standards for HAI information systems and data sources 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 	To be determined



Department of Health & Human Re	sources				
		inpatient and outpatient healthcare settings			
		ii. Promote definitional alignment and data element			
		standardization needed to link HAI data across the nation.			
Status and Na	arrative Pla	n: At this point, there is inadequate staffing to plan for this imperative. This impor	tant part of surveillance will		
		rginia infrastructure improves.			
		Some investigation of the province in the contract of the province in the contract of the cont			
Check Items	Check	Items Planned for Implementation (or currently underway)	Target Dates for		
Underway	Items	(Implementation		
onder way	Planned		picinentation		
	- iaiiica	12. Enhance electronic reporting and information technology for healthcare	See Objective 1.6		
		facilities to reduce reporting burden and increase timeliness, efficiency,			
		comprehensiveness, and reliability of the data			
	Х	i. Report HAI data to the public	See objective 4.3 and 4.5		
Cooobiootivo			See objective 4.3 and 4.5		
See objectives 1.6, 4.3 and 4.5.					
Check Items	Check	Items Planned for Implementation (or currently underway)	Target Dates for		
	Items	tems Flamed for implementation (or currently underway)			
Underway	1001110		Implementation		
	Planned				
	Х	13. Make available risk-adjusted HAI data that enables state agencies to make	See objective 4.3 and 4.5		
		comparisons between hospitals.			
See objective 4.3 and 4.5					
	T				
Check Items	Check	Items Planned for Implementation (or currently underway)	Target Dates for		
Underway	Items		Implementation		
	Planned				
		14. Enhance surveillance and detection of HAIs in nonhospital settings			
Status and Narrative Plan: At this point, there is inadequate staffing to plan for this imperative.					

3. Prevention



Table 3: State planning for HAI prevention activities

Check	Check	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Items	Items		
Underway	Planned		
		Implement HICPAC recommendations.	
	Χ	i. Develop strategies for implementation of HICPAC	Achieved
		recommendations for at least 2 prevention targets	
		specified by the state multidisciplinary group.	

Status and Narrative Plan: The list of hospitals that committed to implement SHEA/IDSA CLABSI prevention recommendations is posted at www.dide.wv.gov.

Check Check Items		Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Underway	Planned		
	X	Establish prevention working group under the state HAI advisory council to coordinate state HAI collaboratives	To be determined

Status and Narrative Plan: There are no resources available to address this objective at this time.

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	Х	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)	



Status and Narrative Plan: Due to lack of resources, this objective cannot be addressed at this time.

Check Check Items		Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Underway	Planned		
		4. Develop state HAI prevention training competencies	
	Χ	i. Consider establishing requirements for education and training	To be determined.
		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	

Status and Narrative Plan: The HAI coordinator will research other states' requirements for certification of infection preventionists and share the findings with the Advisory Group during 2012. In 2011, Long-term Care Workgroup was established and discussed about conducting joint regional trainings on basic infection prevention and MDROs and *Clostridium difficile* infection 101 (CDI) for long-term care and acute care facilities and local health departments. Division of Infectious Disease Epidemiology (DIDE) of West Virginia Bureau for Public Health is currently developing a standardized curriculum for this training and 8 regional trainings will be conducted for each surveillance region throughout the state this year.

Check Check		Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Items Items			
Underway	Planned		
		Implement strategies for compliance to promote adherence to HICPAC recommendations	



Department of Health & Hum	an Resources				
	X	establish best practices to ensure adherence ii. Coordinate/liaise with regulation and oversight activities such as inpatient or outpatient facility licensing/accrediting bodies and professional licensing organizations to prevent HAIs iii. Improve regulatory oversight of hospitals,	To be determined. To be determined.		
	^	enhancing surveyor training and tools, and adding sources and uses of infection control data	To be determined.		
		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			
Status and Narrative Plan: There are no current plans to address this item. This issue will be revisited in the future.					
Check	Check	Items Planned for Implementation (or currently underway)	Target Dates for Implementation		
Items	Items				
Underway	Planned				
		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)			
Status and N	Status and Narrative Plan: West Virginia has insufficient resources to plan towards this imperative at this time.				
Check	Check	Items Planned for Implementation (or currently underway)	Target Dates for Implementation		
Items	Items				
Underway	Planned				
		7. Establish collaborative to prevent HAIs in nonhospital settings (e.g., long term care, dialysis)			
Status and N	Narrative Plan	n: Outbreak investigations suggest that substantial training needs exist in lo	ng term care settings in West Virginia.		
During 2012, WVBPH will conduct regional long term care infection prevention training jointly with acute care facilities, local, regional and					
state health departments. Representatives from APIC-WV, West Virginia Healthcare Association and West Virginia Medical Institute have					



een invited to serve as consultants.	



4. Evaluation and Communications

Table 4: State HAI communication and evaluation planning

Check Items	Check	Items Planned for Implementation (or currently underway)	Target Dates for
Underway	Items		Implementation
	Planned		
		1. Conduct needs assessment and/or evaluation of the state HAI	
		program to learn how to increase impact	
	X	i. Establish evaluation activity to measure	Achieved
		progress towards targets and	
	Χ	ii. Establish systems for refining approaches	To be determined
		based on data gathered	

Status and Narrative Plan:

In 2012, a specific needs assessment for NHSN HAI surveillance training will be conducted to infection preventionists by West Virginia Health Care Authority and the findings will be shared with the Advisory Group.

Objective 4.1: On an annual basis by December 31, the state HAI plan shall be revised to reflect current priorities, and posted to www.dide.wv.gov.

Date Due 4.		4.1	Evaluation Measure	Person Respons	ible
Annually by Th		This	updated plan is posted to www.dide.wv.gov	HAI Coordinator	·,
December 31,				Infectious Disea	se Epidemiology
beginning in 2009				Programmer An	alyst I,
				Bureau for Publ	ic Health
Check Items Chec		ck	Items Planned for Implementation (or currently	underway)	Target Dates for
IInderway Items			Implementation		

Underway	Items Planned	items Planned for implementation (or currently underway)	Implementation
		2. Develop and implement a communication plan about the state's HAI program and progress to meet public and private stakeholders needs	



rui	ient of Health & Human Resources			
		Χ	i. Disseminate state priorities for HAI	June 30, 2012
			prevention to healthcare organizations,	
			professional provider organizations,	
			governmental agencies, non-profit public	
			health organizations, and the public	

Status and Narrative Plan: The HAI coordinator prepared an executive summary of this plan for distribution to APIC-WV, WV Hospital Association, WV Healthcare Association, Office of Healthcare Facility Licensure and Certification (OHFLAC), licensing boards and professional organizations. This HAI plan and the executive summary will be posted at www.dide.wv.gov. The HAI coordinator attends quarterly APIC-WV meetings and share information on the plan and regional long-term care infection prevention training. As required by law, WV Health Care Authority will update the legislature on the status of public reporting of HAI by January 15, annually. The report is posted at https://www.hcawv.org/Infect.

Objective 4.2: West Virginia Hospital Association (WVHA) shall disseminate the HAI Plan Executive Summary to stakeholders via e-mail when it is available.

Date Due	4.2 Evaluation Measure	Person Responsible
June, 2012	HAI Plan Executive Summary has been sent to	Jim Kranz,
	stakeholders from the West Virginia Hospital	West Virginia Hospital Association
	Association.	

Objective 4.3: West Virginia HCA shall make a report of progress on their activities as required under West Virginia State Code 16-5B-17 by January 15, annually.

Date Due	4.3 Evaluation Measure	Person Responsible
January 15,	Report is submitted to the West Virginia State	West Virginia HCA
annually	Legislature	

Objective 4.4: West Virginia Bureau for Public Health shall communicate about the state planning process at least annually with the Office of Health Facility Licensure and Certification (OHFLAC) and the medical, osteopathic, dental, pharmacy and nursing boards.



Date Due	4.4 Evaluation Measure	Person Responsible
Annually, by	Meeting minutes document communication with	HAI Coordinator,
December 31	OHFLAC and the medical, osteopathic, dental,	West Virginia Bureau for Public
	pharmacy and nursing licensing boards.	Health

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
Х		3. Provide consumers access to useful healthcare quality	Ongoing
		measures	

Status and Narrative Plan: Currently, the HCAWV makes available the HAI Annual Report to the public via the website http://www.hcawv.org/Infect. The HAI Control Advisory Panel will be making recommendations on additional consumer friendly formats for releasing HAI data.

Objective 4.5: On an annual basis by December 31, the West Virginia HCA shall compile and release HAI summary data publicly.

Date Due	4.5 Evaluation Measure	Person Responsible
Annually by	HAI summary data is available to the public.	West Virginia Health Care Authority
December 31		

Check Items Underway	Check Items Planned	Items Planned for Implementation (or currently underway)	Target Dates for Implementation
	X	4. Identify priorities and provide input to partners to help guide patient safety initiatives and research aimed at reducing HAIs	ongoing

Status and Narrative Plan: Through needs assessment (See objective 4.1), the multidisciplinary committee will identify current priorities and use that information to update prevention efforts.