

# Tennessee Healthcare-Associated Infections (HAI) Plan



March 16 Webinar



## Outline

- **National Initiatives and Plan**
- **State Plan Overview**
- **Surveillance Activities**
  - Targets
  - Timeline

## National Initiatives and Plans



## HAI Focused National Initiatives

- **Healthy People 2020 lists HAIs as a Phase II Topic Area**
- **Congressional Activity**
  - Legislation – Healthcare Reform
  - Hearings
    - 3 hearings on HAIs (2008-2009)
    - Antimicrobial resistance hearing proposed for Spring 2010
- **GAO Reports**
  - 2008-2009: 4 HAI related investigations
  - Antimicrobial Resistance, Spring 2010






## GAO Report: Recommendations

- Improve central coordination of HHS-supported prevention and surveillance strategies
  - Identify priorities among CDC guidelines to:
    - Promote implementation of high priority practices
  - Establish greater consistency and compatibility of the HAI-related data across HHS systems to:
    - Increase reliable national estimates of HAIs
- => National HAI Action Plan




## Plans to Enable Healthcare Facilities to Use NHSN to Report to CMS

- Collaboration between CDC's Division of Healthcare Quality Promotion and CMS's Office of Clinical Standards and Quality
- Plans under way to enable healthcare facilities to use NHSN to report central-line associated bloodstream infections (CLABSIs) and surgical site infections (SSIs) to CMS's QualityNet database
- Facility-specific CLABSI and SSI data will be posted at Hospital Compare, a publicly facing website maintained by the U.S. Department of Health and Human Services (HHS)




## CDC's NHSN/CMS's QualityNet Collaboration: Reporting Plans

- **Pay for Reporting**
  - CLABSIs and SSIs will be reported to QualityNet as part of CMS' Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU)
- **Data submission to QualityNet**
  - Technical options under consideration are using NHSN Group Function or developing NHSN reporting feature
- **Data Validation**
  - Patient-level record validation is a requirement for quality measurement reporting under RHQDAPU
- **Timeline**
  - CLABSIs reporting beginning in 2010, SSIs in 2011
- **Facility-specific CLABSI and SSI data will be posted at Hospital Compare**




## HAI Action Plans

- **National plan will:**
  - Establish national goals for reducing HAIs
  - Include short- and long-term benchmarks
  - Outline opportunities for collaboration with external stakeholders
  - Coordinate and leverage HHS resources to accelerate and maximize impact
- **State plans will:**
  - Be consistent with the HHS Action Plan
  - Contain measurable 5-year goals and interim milestones for preventing HAIs



## National HAI Action Plan: Priorities

- **Priority Areas**
  - Catheter-Associated Urinary Tract Infection
  - Central Line-Associated Blood Stream Infection
  - Surgical Site Infection
  - Ventilator-Associated Pneumonia
  - MRSA
  - Clostridium difficile
- **Tier 1 Implementation**
  - hospitals
- **Tier 2 Implementation**
  - Ambulatory Surgical Centers
  - Dialysis Centers



## National HAI Action Plan: Metrics, Data, and 5-Year Targets

Metric	Data	Target
Central line bloodstream infections	NHSN	≥ ↓ 50%
Adherence to central line insertion practices	NHSN	100%
Hospitalizations with <i>Clostridium difficile</i>	Admin	≥ ↓ 30%
<i>Clostridium difficile</i> infections	NHSN	≥ ↓ 30%
Catheter-associated urinary tract infections	NHSN	≥ ↓ 25%
MRSA incidence rate (healthcare-associated)	EIP	≥ ↓ 50%
MRSA bacteremia (healthcare onset facility-wide) (LabID event)	NHSN	≥ ↓ 25%
Surgical site infections	NHSN	≥ ↓ 25%
Surgical Care Improvement Program adherence	SCIP	≥ 95%

## TN State HAI Action Plan Overview



- Infrastructure
- Evaluation/Communications
- Prevention
- Surveillance




### Infrastructure

- **Multidisciplinary Advisory Group (MDAG)**
  - Establish prevention targets
- **Develop laboratory capacity to confirm resistance and perform typing**
- **Electronic reporting of HAI data**
  - ELR to support MRSA and *C. difficile* LabID Event



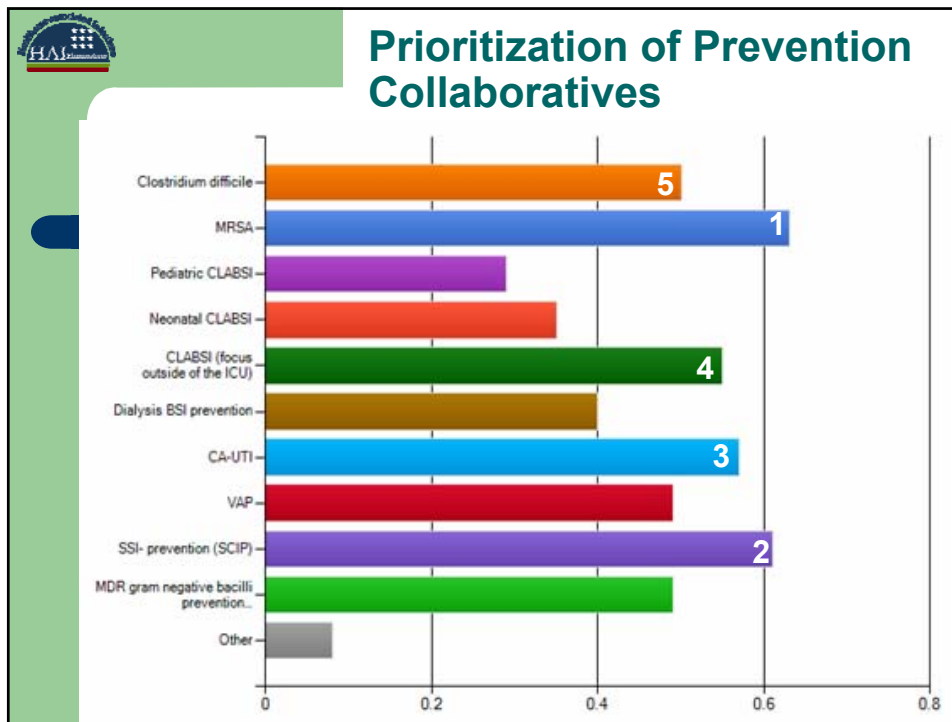
## Evaluation & Communications

- Needs assessments
- Evaluate progress toward prevention targets
- Communication
  - Partners
  - Public
    - Annual State HAI Report

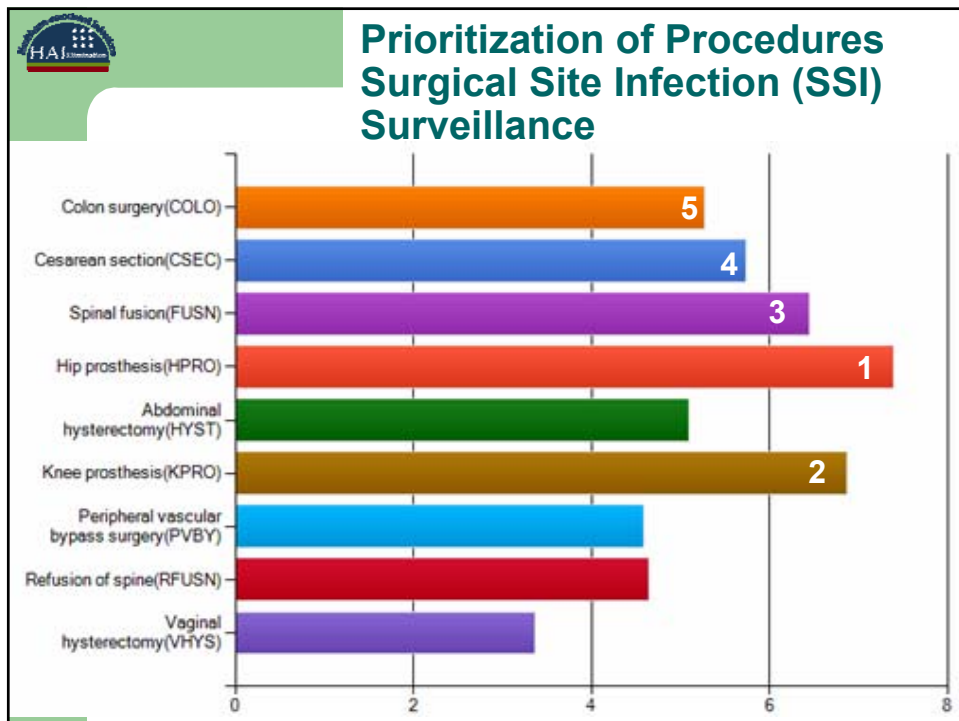
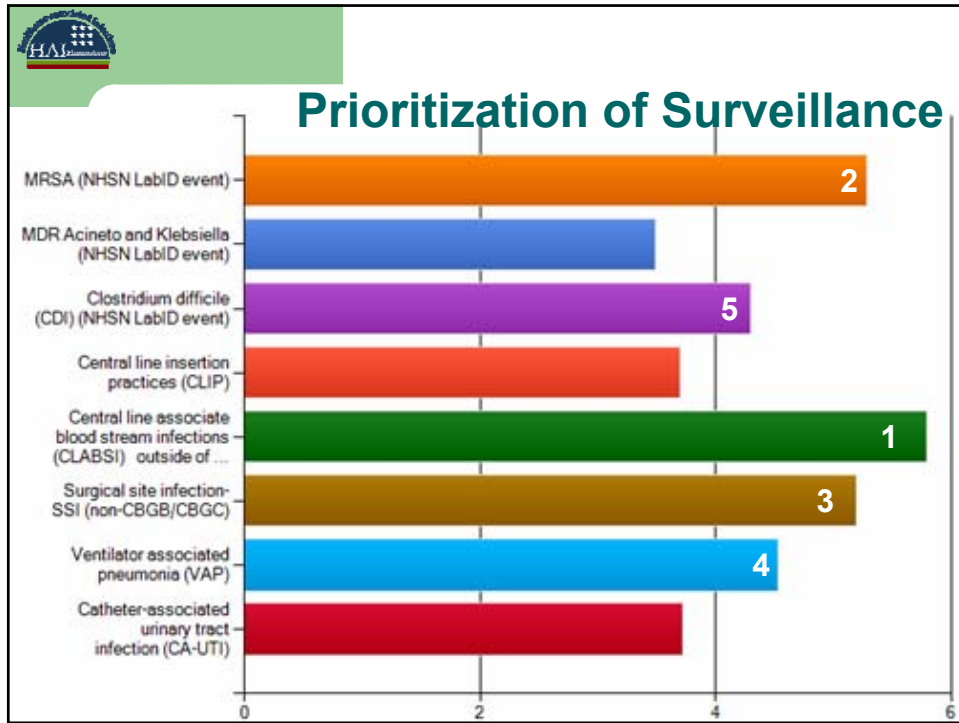



## Prevention

- Survey conducted in September 2009 to identify prevention priorities (*n=63*) (*1 vote per facility*)
- Implement HICPAC recommendations for:
  - CLABSI
  - MRSA
  - *Clostridium difficile*
  - SSI
- HAI Collaboratives
  - QSource (Quality Improvement Organization)
  - Tennessee Center for Patient Safety [TCPS]
  - Tennessee Initiative for Perinatal Quality Care [TIPQC]




- ## Surveillance
- **Mandates in TN**
    - CLABSI in ICUs in facilities with ADC 25+
      - excluding Level 1 trauma and burn
      - 76 facilities
    - SSI reporting post CBGB/CBGC
    - Invasive MRSA (not facility-specific, not via NHSN)
    - Invasive VRE (not facility-specific, not via NHSN)
  - **Survey conducted in September 2009**
    - Identify priorities for surveillance (*n*=63)





### Number of Inpatient Surgical Procedures in TN, 2007 (hospitals that perform at least 25 procedures)

Proc	# Hospitals	min	max	mean	median	Total ≥25
COLO	62	26	522	120	78	7,461
CSEC	75	33	2,447	399	224	29,930
FUSN	38	25	1,669	285	190	10,846
HPRO	56	27	728	153	110	8,577
KPRO	63	28	3,435	602	285	37,946

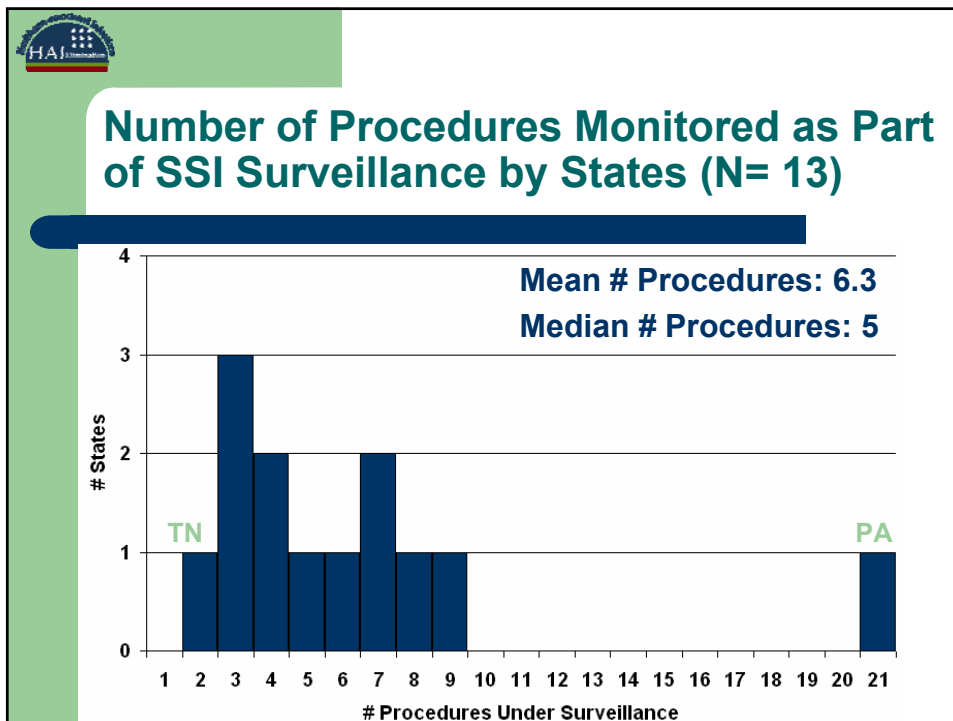
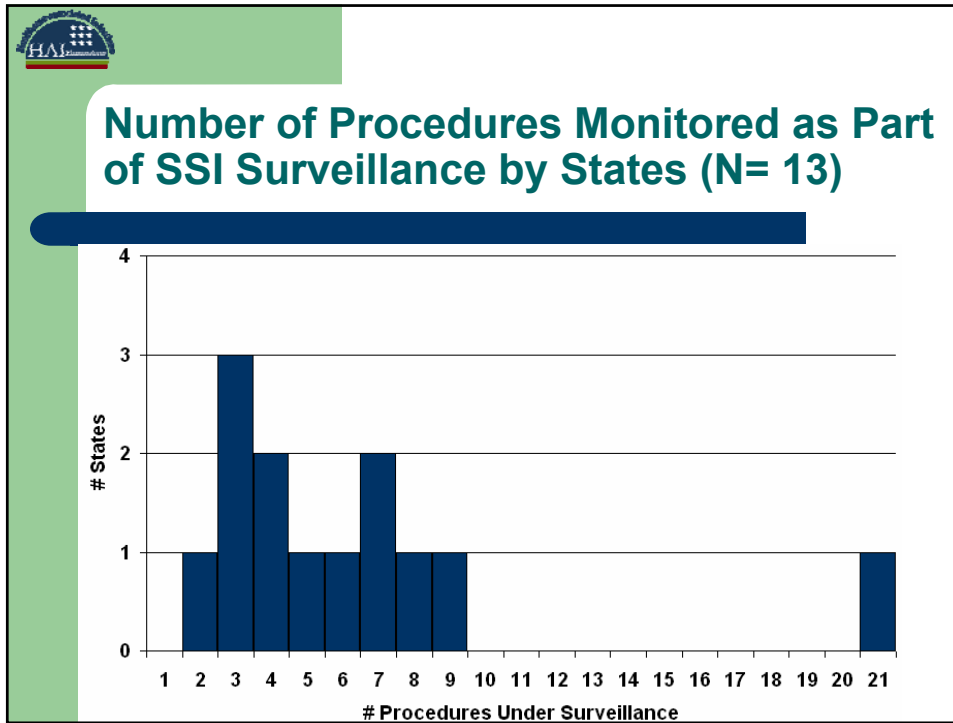


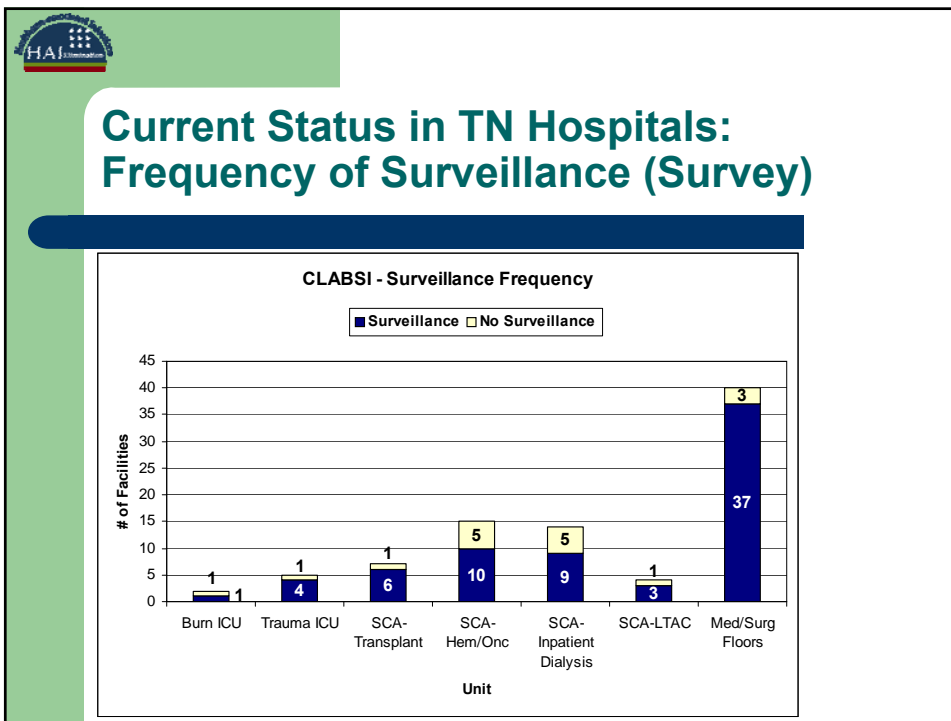
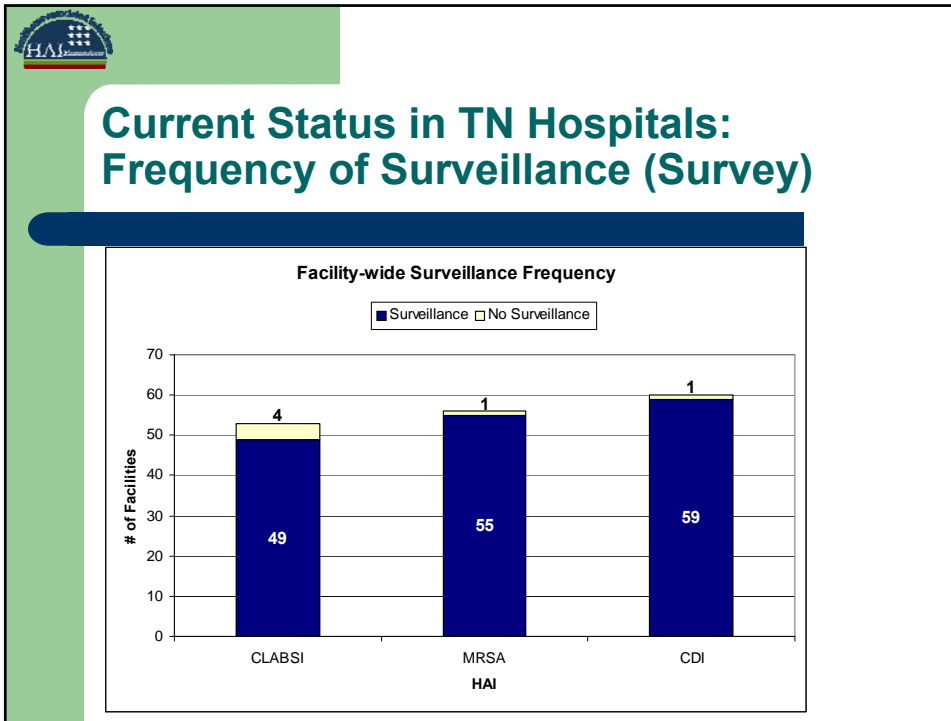
### Measures Required by States that Use NHSN for Mandatory Reporting (n=21)

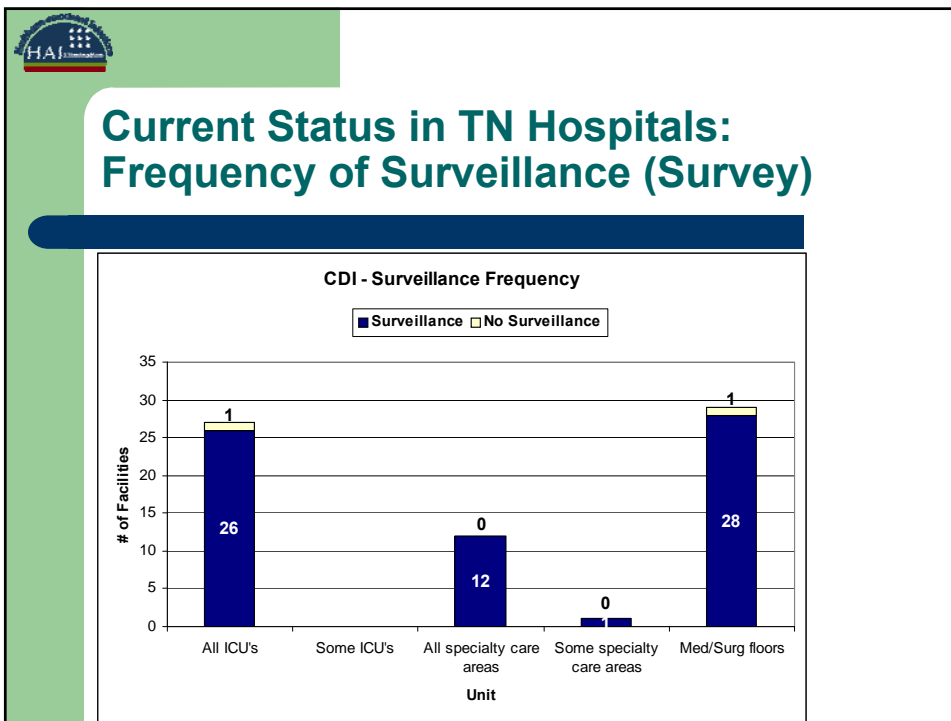
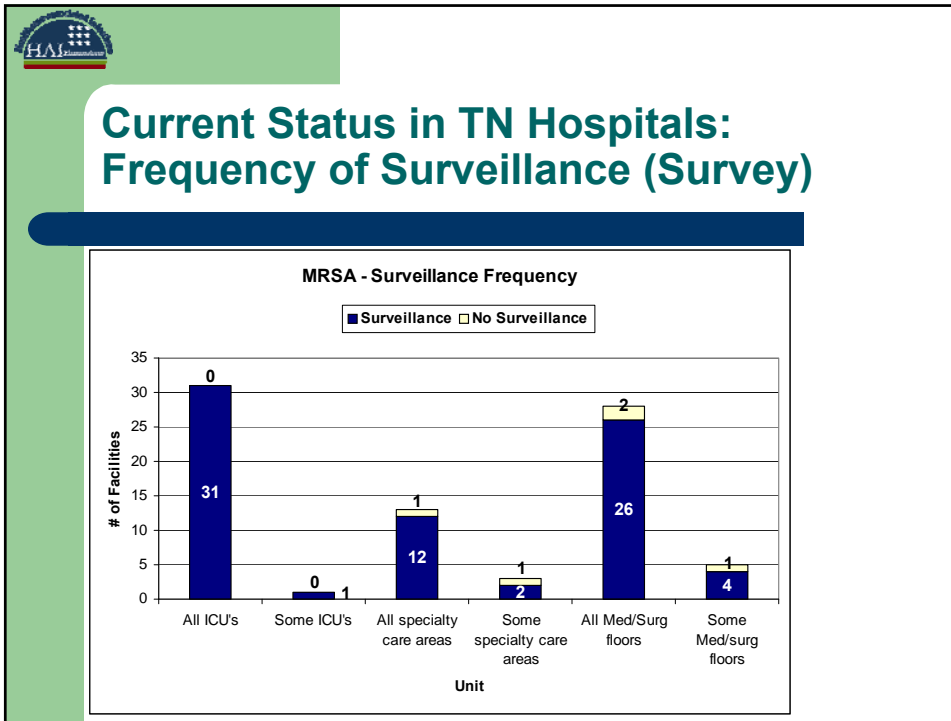
NY SC    CT CA MD OK VA            OR  
 VT CO    TN PA DE MA WA IL    NH NJ WV    NV TX


	2007	2008	2009	2010	2011
CLABSI	CA, CO, CT, DE, IL, MA, MD, NH, NJ, NV, NY, OK, OR, PA, SC, TN, TX, VA, VT, WA, WV				
CAUTI	NJ, PA				
SSI	CO, IL, MA, NH, NJ, NY, OR, PA, SC, TN, TX, VT, WA				
VAP	NH, OK, PA, WA				
Dialysis events	CO				
CLIP	CA, NH				
MDRO	NJ, NY, other states are considering its use				
HCW influenza vaccination	WV, other states are considering its use				

As of 1/26/2010











## Proposed Surveillance Areas

- **CLABSI**
- **SSI**
  - CBGB/CBGC
  - HPRO
- **MRSA**
  - LabID Event (blood cultures)
- **CDI**
  - LabID Event



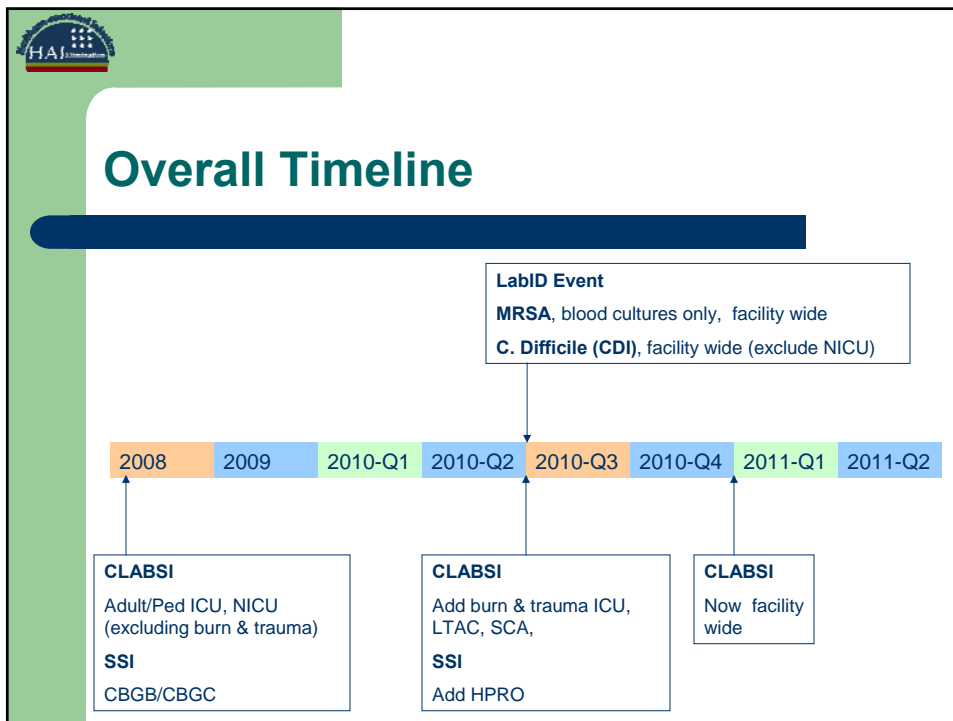
## Proposed Surveillance Areas

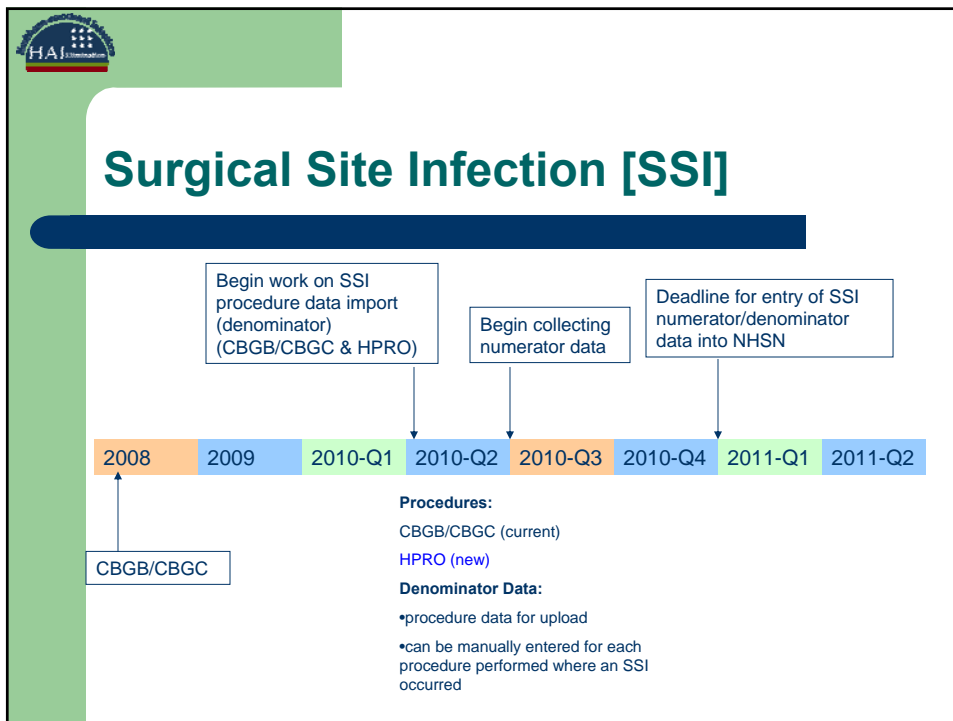
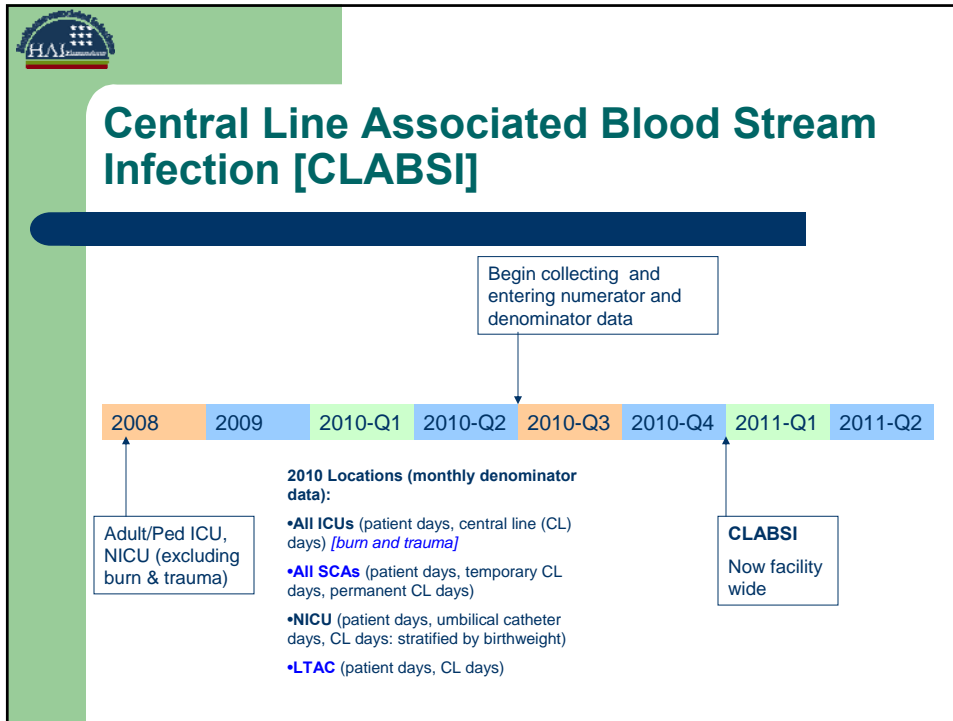
HAI	Current	Proposed	Timeline
<b>CLABSI</b>	Facilities ≥25 ADC; all ICUs (except burn and trauma)	Facilities ≥25 ADC; all ICUs; all SCAs; all LTACs	July 2010; facility-wide in 2011
<b>SSI</b>	CBGB/CBGC	CBGB/CBGC & HPRO	July 2010
<b>MRSA</b>	Invasive MRSA infections	MRSA blood cultures only for ACH and LTAC (facility-wide + ED); LabID Event	July 2010
<b>CDI</b>	Severe <i>C. diff</i> infections (death, ICU admission, colectomy, toxic megacolon)	LabID Event in ACH and LTAC (facility-wide + ED), exclude NICU	July 2010

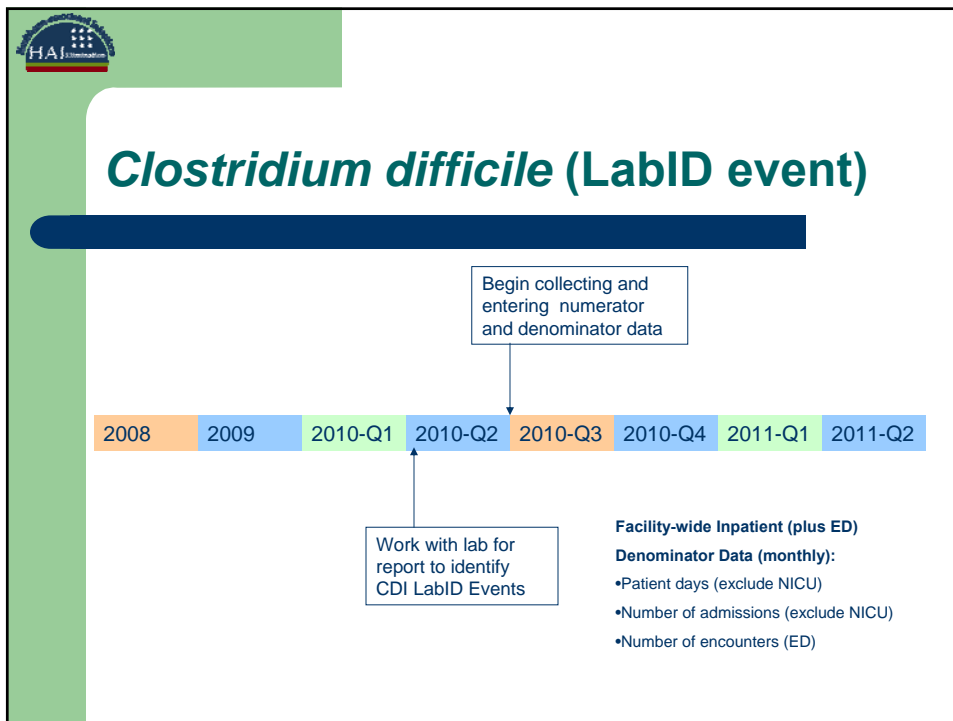
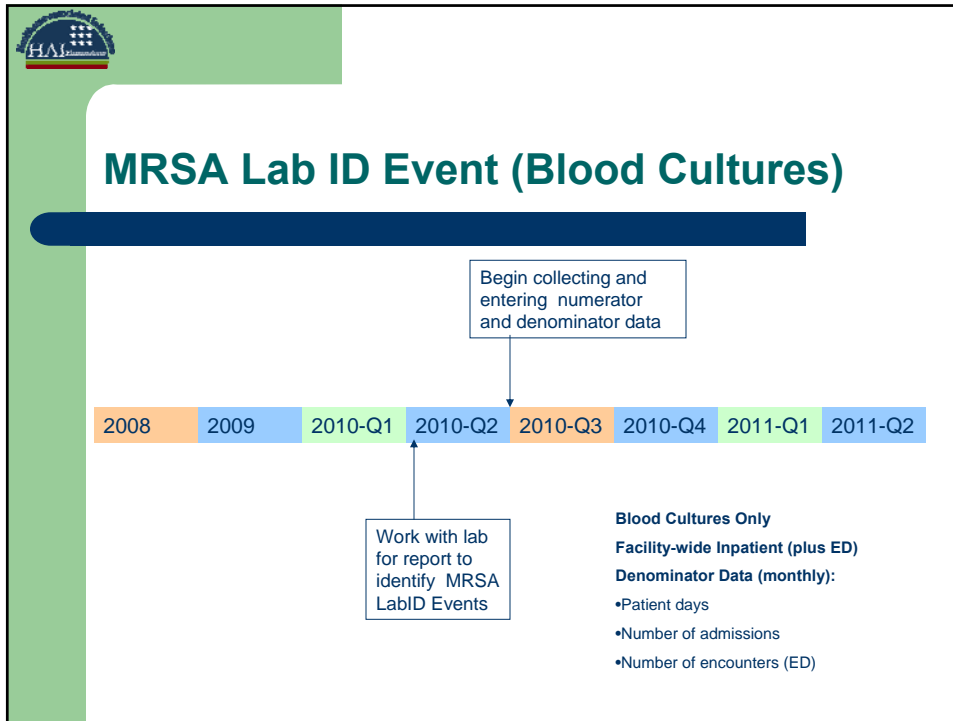


## Denominator Data

Condition	Denominators	Extracts
<b>CLABSI</b>	<ul style="list-style-type: none"> <li>•All ICUs (patient days, central line (CL) days) [burn and trauma]</li> <li>•All SCAs (patient days, temporary CL days, permanent CL days)</li> <li>•NICU (patient days, umbilical catheter days, CL days: stratified by birthweight)</li> <li>•LTAC (patient days, CL days)</li> </ul>	
<b>SSI</b>	Procedure data for CBGB/CBGC and HPRO	Procedure extract from surgical software
<b>MRSA</b>	<u>Monthly:</u> Patient days, Number of admissions, Number of encounters (Emergency Dept)	Report of positive blood cultures for MRSA from lab
<b>CDI</b>	<u>Monthly:</u> Patient days (exclude NICU), Number of admissions (exclude NICU), Number of encounters (Emergency Dept)	Report of positive C diff tests from lab










HAI		NHSN National Healthcare Safety Network		Laboratory-identified MDRO or CDAD Event		OMB No. 0920-0666 Exp. Date: 09-30-2012	
*Required for saving							
Facility ID:			Event #:				
*Patient ID:			Social Security #:				
Secondary ID:							
Patient Name, Last:		First:		Middle:			
*Gender: M F			*Date of Birth:				
Ethnicity (Specify):			Race (Specify):				
Event Details							
*Event Type: LabID				*Date Specimen Collected:			
*Specific Organism Type: (Check one)							
<input type="checkbox"/> MRSA <input type="checkbox"/> MSSA <input type="checkbox"/> VRE <input type="checkbox"/> MDR-Klebsiella <input type="checkbox"/> MDR-Acinetobacter <input type="checkbox"/> C. difficile							
*Outpatient: Yes No		*Specimen Body Site/System:			*Specimen Source:		
*Date Admitted to Facility:		*Location:			*Date Admitted to Location:		
*Has patient been discharged from your facility in the past 3 months? Yes No							
If Yes, date of last discharge from your facility:							
Custom Fields							

HAI		NHSN National Healthcare Safety Network		Laboratory-identified MDRO or CDAD Event		OMB No. 0920-0666 Exp. Date: 09-30-2012	
*Required for saving							
Facility ID:			Event #:				
*Patient ID:			Social Security #:				
Secondary ID:							
Patient Name, Last:		First:		Middle:			
*Gender: M F			*Date of Birth:				
Ethnicity (Specify):			Race (Specify):				
Event Details							
*Event Type: LabID				*Date Specimen Collected:			
*Specific Organism Type: (Check one)							
<input type="checkbox"/> MRSA <input type="checkbox"/> MSSA <input type="checkbox"/> VRE <input type="checkbox"/> MDR-Klebsiella <input type="checkbox"/> MDR-Acinetobacter <input type="checkbox"/> C. difficile							
*Outpatient: Yes No		*Specimen Body Site/System:			*Specimen Source:		
*Date Admitted to Facility:		*Location:			*Date Admitted to Location:		
*Has patient been discharged from your facility in the past 3 months? Yes No							
If Yes, date of last discharge from your facility:							
Custom Fields							

Codes for Specimen body site/system and specimen source:  
[http://www.cdc.gov/nhsn/PDFs/pscManual/LabID\\_Event\\_Specimen\\_Source\\_Codes\\_Final\\_010110.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/LabID_Event_Specimen_Source_Codes_Final_010110.pdf)


HAI		<b>MRSA</b>	
		<small>OMB No. 0920-0666 Exp. Date: 09-30-2012</small>	
Laboratory-identified MDRO or CDAD Event			
*required for saving			
Facility ID:		Event #:	
*Patient ID: <b>123456</b>		Social Security #:	
Secondary ID:			
Patient Name, Last:	First:	Middle:	
*Gender: <b>(M)</b> F	*Date of Birth: <b>2/28/1924</b>		
Ethnicity (Specify):	Race (Specify):		
Event Details			
*Event Type: LabID	*Date Specimen Collected: <b>3/10/2010</b>		
*Specific Organism Type: (Check one)			
<input checked="" type="checkbox"/> MRSA <input type="checkbox"/> MSSA <input type="checkbox"/> VRE <input type="checkbox"/> MDR-Klebsiella <input type="checkbox"/> MDR-Acinetobacter <input type="checkbox"/> C. difficile			
*Outpatient: Yes <b>(No)</b>	*Specimen Body Site/System: <b>CARD</b>	*Specimen Source: <b>BLDSPC</b>	
*Date Admitted to Facility: <b>3/1/2010</b>	*Location: <b>MEDICU</b>	*Date Admitted to Location: <b>3/1/2010</b>	
*Has patient been discharged from your facility in the past 3 months? <b>(Yes)</b> No			
If Yes, date of last discharge from your facility: <b>2/20/2010</b>			
Custom Fields			

HAI		<b>C. difficile</b>	
		<small>OMB No. 0920-0666 Exp. Date: 09-30-2012</small>	
Laboratory-identified MDRO or CDAD Event			
*required for saving			
Facility ID:		Event #:	
*Patient ID: <b>123456</b>		Social Security #:	
Secondary ID:			
Patient Name, Last:	First:	Middle:	
*Gender: <b>(M)</b> F	*Date of Birth: <b>2/28/1924</b>		
Ethnicity (Specify):	Race (Specify):		
Event Details			
*Event Type: LabID	*Date Specimen Collected: <b>3/14/2010</b>		
*Specific Organism Type: (Check one)			
<input type="checkbox"/> MRSA <input type="checkbox"/> MSSA <input type="checkbox"/> VRE <input type="checkbox"/> MDR-Klebsiella <input type="checkbox"/> MDR-Acinetobacter <input checked="" type="checkbox"/> C. difficile			
*Outpatient: Yes <b>(No)</b>	*Specimen Body Site/System: <b>DIGEST</b>	*Specimen Source: <b>STOOL</b>	
*Date Admitted to Facility: <b>3/1/2010</b>	*Location: <b>MEDICU</b>	*Date Admitted to Location: <b>3/1/2010</b>	
*Has patient been discharged from your facility in the past 3 months? <b>(Yes)</b> No			
If Yes, date of last discharge from your facility: <b>2/20/2010</b>			
Custom Fields			



## Next Steps

- **Focus Groups to identify and address barriers to implementation**
  - **Proposed Groups**
    - **MRSA/CDI**
      - Lab data extract to identify LabID Events for **MANUAL** entry (prior to automated reporting)
    - **SSI**
      - Procedure data import for denominator data
      - Extracts from surgical software
    - **CLABSI**
      - Collection of denominator data in non-ICU settings
    - **Others???**
  - **Send out link to solicit participation**



## Next Steps

- **Continuation of MDAG meetings**
  - Next meeting May 3 [MCRO]
- **NHSN Training Events**
- **NHSN Enrollment**
- **NHSN Technical Support**

## Questions & Discussion



### **Authority: Rules and Regulations for Communicable and Environmental Diseases**

- **Chapter 1200-14-01**

**Reportable diseases (1200-14-01.-02):**

**(1) All healthcare providers and other persons knowing of or suspecting a case, culture or specimen of a reportable disease or event shall report that occurrence to the Department of Health in the time and manner set forth by the Commissioner in the List.**

*Emphasis added*



## Chapter 1200-14-01 (cont'd)

(2) The Commissioner shall re-evaluate, update, and post the List at least annually and from time to time as appropriate. The Commissioner shall post the annual update on or before November 15<sup>th</sup> of each year and this new List shall become effective starting January 1<sup>st</sup> of the following year. If the Commissioner posts an updated List more frequently than on an annual basis, then the updated List will become effective on the date stated in the List. The List shall be available online at the Department of Health's web page and in print.



## Definition of Terms : 12-14-01-.01

- **Event**: an occurrence of public health significance and required by the Commissioner to be reported in the List
- **List**: Means the List of Reportable Diseases and Reporting Mechanisms as set forth by the Commissioner

URL of Reportable Diseases:

- <http://health.state.tn.us/ceds/notifiable.htm>