Texas Healthcare Associated Infection (HAI) Reporting and Validation

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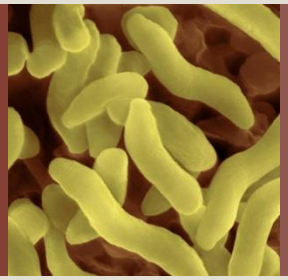
Objectives

1. Discuss the Texas reporting requirements for healthcare associated infections (HAIs).
2. Discuss the National Healthcare Safety Network (NHSN) frequently asked questions
3. Describe the remote audit process
4. Describe the HAI data validation process.
5. Q & A

Overview of Texas Reporting



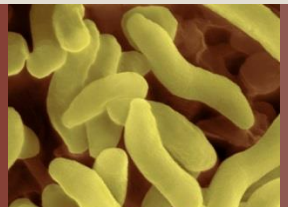
DSHS Reporting Requirements

Central line-associated bloodstream infections (CLABSI) in the following special care settings: adult, pediatric and/or adolescent ICUs & NICUs (Level II/III & Level III Nurseries).

Catheter associated urinary tract infections (CAUTI) in the following special care settings: adult, pediatric and/or adolescent ICUs.

Surgical site infections (SSI)

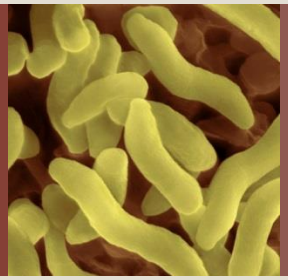
- CHILDREN'S HOSPITALS: Cardiac procedures, heart transplants, spinal surgery with instrumentation, and VP shunt procedures
- ALL OTHER GENERAL HOSPITALS & ASCs: Colon surgeries, hip & knee arthroplasties, abdominal & vaginal hysterectomies, vascular procedures, and coronary artery bypass grafts



CMS Reporting Requirements

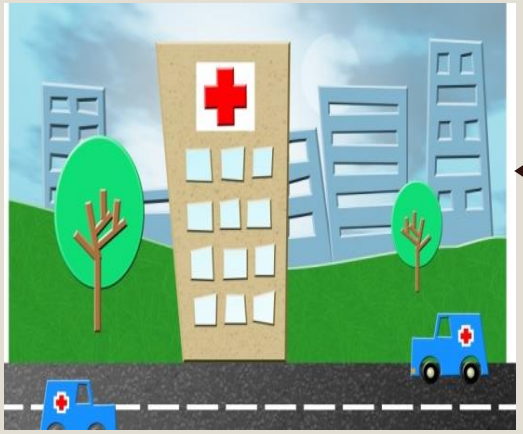
CMS Reporting Program	HAI Event	Reporting Specifications	Reporting Start Date
Hospital Inpatient Quality Reporting (IQR) Program	CLABSI	Adult, Pediatric, and Neonatal ICUs	January 2011
	CAUTI	Adult and Pediatric ICUs	January 2012
	SSI: COLO	Inpatient COLO Procedures	January 2012
	SSI: HYST	Inpatient HYST Procedures	January 2012
	MRSA Bacteremia LabID Event	FacWideIN	January 2013
	C. difficile LabID Event	FacWideIN	January 2013
	Healthcare Personnel Influenza Vaccination	All Inpatient Healthcare Personnel	January 2013
	Medicare Beneficiary Number	All Medicare Patients Reported into NHSN	July 2014
	CLABSI	Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards	January 2015
	CAUTI	Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards	January 2015
Hospital Outpatient Quality Reporting (OQR) Program	Healthc		

CMS Reporting Program	HAI Event	Reporting Specifications	Reporting Start Date
Ambulatory Surgery Centers Quality Reporting (ASCQR) Program	Healthcare Personnel Influenza Vaccination	All Healthcare Personnel	October 2014
PPS-Exempt Cancer Hospital Quality Reporting (PCHQR) Program	CLABSI	All Bedded Inpatient Locations	January 2013
	CAUTI	All Bedded Inpatient Locations	January 2013
	SSI: COLO	Inpatient COLO Procedures	January 2014
	SSI: HYST	Inpatient HYST Procedures	January 2014



HAI Reporting Overview

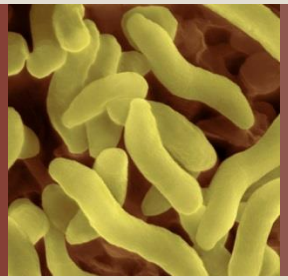
NHSN
National Healthcare Safety Network



Alerts regarding data & reports

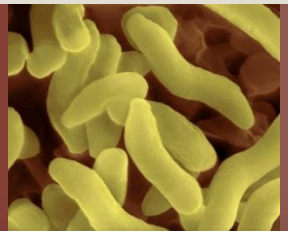
View reports & make comments

TEXAS HEALTHCARE SAFETY NETWORK



When Do We Report?

Reporting Quarter	Q1: Jan 1 – Mar 31	H1: Jan 1 – June 30	Q3: Jul 1 – Sept 30	H2: Jul 1 – Dec 31
Facility data submission deadline	Within 60 days of end of reporting quarter			
DSHS takes preliminary data snapshot	Jun 1	Sept 1	Dec 1	Mar 1
DSHS sends email to facilities to review data	~Jun 15	~Sept 15	~Dec 15	~Mar 15
Facility data corrections due	Jun 30	Sept 30*	Dec 31	Mar 31*
DSHS takes final data snapshot	July 1	Oct 1	Jan 1	Apr 1
DSHS sends email to facility to review data summary and make comments	NA	Oct 15	NA	Apr 15
Facility comment period deadline	NA	Oct 30	NA	Apr 30
DSHS review of comments	NA	Nov 15	NA	May 15
Public posting of data summary and approved comments	NA	Dec 1	NA	Jun 1



HAI Reports:

http://txhsn.dshs.texas.gov/HCSreports/

HAI Home
HAI Data Home
Annual Reports
Acronyms
Definitions
Understanding the Data
Frequently Asked Questions
Contact Us

Texas Health Care-Associated Infections (HAI) Reports by Healthcare Facility

People can get infections from hospitals, surgery centers or other places that offer health care. This is a big public health problem. A recent survey showed that 722,000 infections (HAIs) occurred in 2011 in the United States. This means that about 4% of hospital patients ended up with at least one infection. All hospitals, clinics and other health care facilities know that stopping HAIs is vital. These HAIs are still a major cause of disease, loss of life and high medical costs. So, laws were put in place to report these infections to the public. There are ways to help manage and prevent them. DSHS created a system to track HAIs. General hospitals and surgery centers are required to report the following HAIs:

- Central line associated bloodstream infections (CLABSIs): These are infections in the blood that happen when a central line (tube that carries medicine and other treatments into a patient's body) is used in a patient.
- Catheter associated urinary tract infections (CAUTIs): These are infections in a patient's urinary tract (often referred to as a urinary tract infection or UTI) after a tube is placed in a patient that allows urine to pass out of the patient.
- Surgical Site Infections (SSIs): These infections happen in a patient's body after the patient has surgery.

To see hospital and surgery center reports, please search below. (Note: Each health care facility reports their own cases and the information is not confirmed by DSHS.)

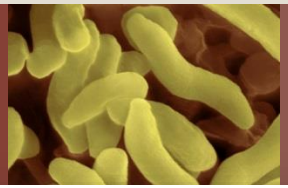
Search for Facility Report

Facility Type ○ Hospital ○ Ambulatory Surgical Center ◉ Both

Facility Name [ ] Help...Facility Name

◉ Name contains this text ○ Name begins with this text

City Name [ ] Help...City Name



HAI Reports

Facility-Specific Health Care Safety Report - Technical Version

Reported by the Texas Department of State Health Services
Time Period: July - December [Final] 2014
Report current as of: 05/04/2015 02:30 PM

Data shown in this report came from the National Healthcare Safety Network (NHSN).

Central Line-Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR)

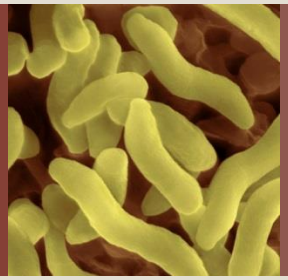
Unit Type	No. of Central Line Days	Number of Infections		SIR and 95% Confidence Interval			SIR Interpretation	No. of CLABSIs that Contributed to the Patient's Death
		Observed	Predicted	SIR	Lower	Upper		
NICU	2533	1	6.622	0.151	0.008	0.745	Fewer — Significantly fewer infections observed than predicted, based on the 2006 - 2008 national baseline	0
ICU	1733	1	2.6	0.385	0.019	1.897	No Different — No significant difference between the number of observed and predicted infections, based on the 2006 - 2008 national baseline	0

* NOTE: The SIR Statistical Interpretation only takes into consideration the SIR values. The facility is responsible for providing any additional explanation regarding deaths and if provided, can be found below in the Facility Comments Section.

Catheter-Associated Urinary Tract Infection (CAUTI) Standardized Infection Ratio (SIR)

Unit Type	No. of Urinary Catheter Days	Number of Infections		SIR and 95% Confidence Interval			SIR Interpretation	No. of CAUTIs that Contributed to the Patient's Death
		Observed	Predicted	SIR	Lower	Upper		
ICU	1850	8	2.22	3.604	1.674	6.843	More — Significantly more infections observed than predicted, based on the 2009 national baseline	0

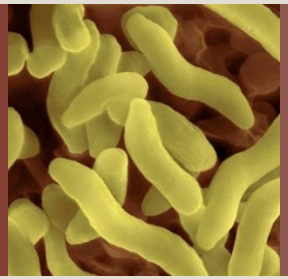
NHSN FAQs



NHSN FAQs

- **QUESTION 1:** Can a secondary Blood Stream Infection (BSI) have a Repeat Infection Timeframe (RIT)?

  - **No.** Only primary Blood Stream Infections create a BSI RIT. Secondary BSIs **do not** create a BSI RIT.
    - If blood specimens meeting LCBI criteria with a date of event outside of the BSI RIT occur, they must be investigated as part of any BSI surveillance.



NHSN FAQs

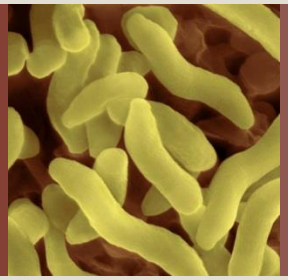
- **QUESTION 2**: If there is not a matching pathogen can it still be called a secondary BSI to a SSI if it is a logical pattern?

  - There are 2 scenarios if the blood and site-specific specimen do not match:

    -If the blood isolate is an element used to meet the site-specific criterion, then the BSI is secondary to that site-specific infection.

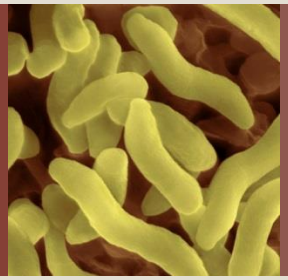
    -If the site-specific culture is an element used to meet the infection site criterion and the blood isolate is not, then the BSI is considered a primary infection.

  - Please note: The organisms identified from blood *must contain* at least one of the following organisms: *Bacteroides spp., Candida spp., Clostridium spp., Enterococcus spp., Fusobacterium spp., Peptostreptococcus spp., Prevotella spp., Veillonella spp., or Enterobacteriaceae*



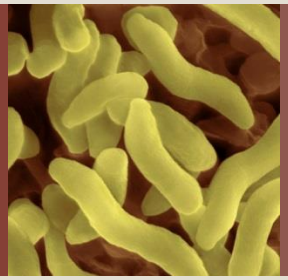
NHSN FAQs

- **QUESTION 3:** Can secondary BSIs be reported for PVAP?
  - Secondary BSIs may be reported for PVAP events, provided that the organism isolated from the blood culture matches an organism isolated from an appropriate respiratory tract specimen.
    - *Note: *Candida* species or yeast not otherwise specified, coagulase-negative *Staphylococcus* spp., and *Enterococcus* spp. cultured from blood cannot be secondary to PVAP, unless cultured from pleural fluid or lung tissue.



NHSN FAQs

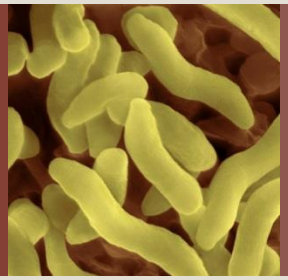
- **QUESTION 4:** Can a BSI be secondary to Necrotizing enterocolitis (NEC) if the primary infection definition does not include site specific culture or positive blood culture?
  - Since NEC criteria do not include a site specific culture or positive blood culture, a BSI identified in the Secondary BSI attribution period can be considered secondary if the patient meets LCBI and NEC criteria.



NHSN FAQs

- **QUESTION 5:** Can you use non-definitive chest x-rays (e.g. opacities/infiltrates noted but pneumonia not specified as cause) to meet pneumonia criteria?
  - If there is any documentation in the medical record that correlates the non-definitive findings on imaging with what is clinically happening with the patient and that documentation suggests it is pneumonia and there is treatment for pneumonia then the imaging tests would be eligible for use in meeting the imaging portion of the PNEU definitions.

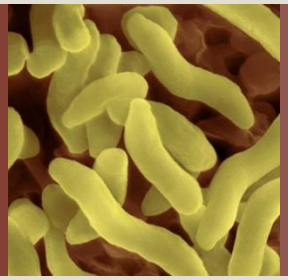
Remote Audit Process



REMOTE AUDIT PROCESS

- There are two audit options:
  - Onsite Audit- This audit process will require an auditor to be on site at the facility for approximately 1 day.
  - Remote EMR Audit- This audit process will require the IP to remotely share their desktop and walk through the EMR with the auditor via conference call.

REMOTE AUDIT PROCESS



REMOTE AUDIT PROCESS

Tue, Nov 8, 2016 12:00 PM - 2:00 PM Central Standard Time

Please join my meeting from your computer, tablet or smartphone.
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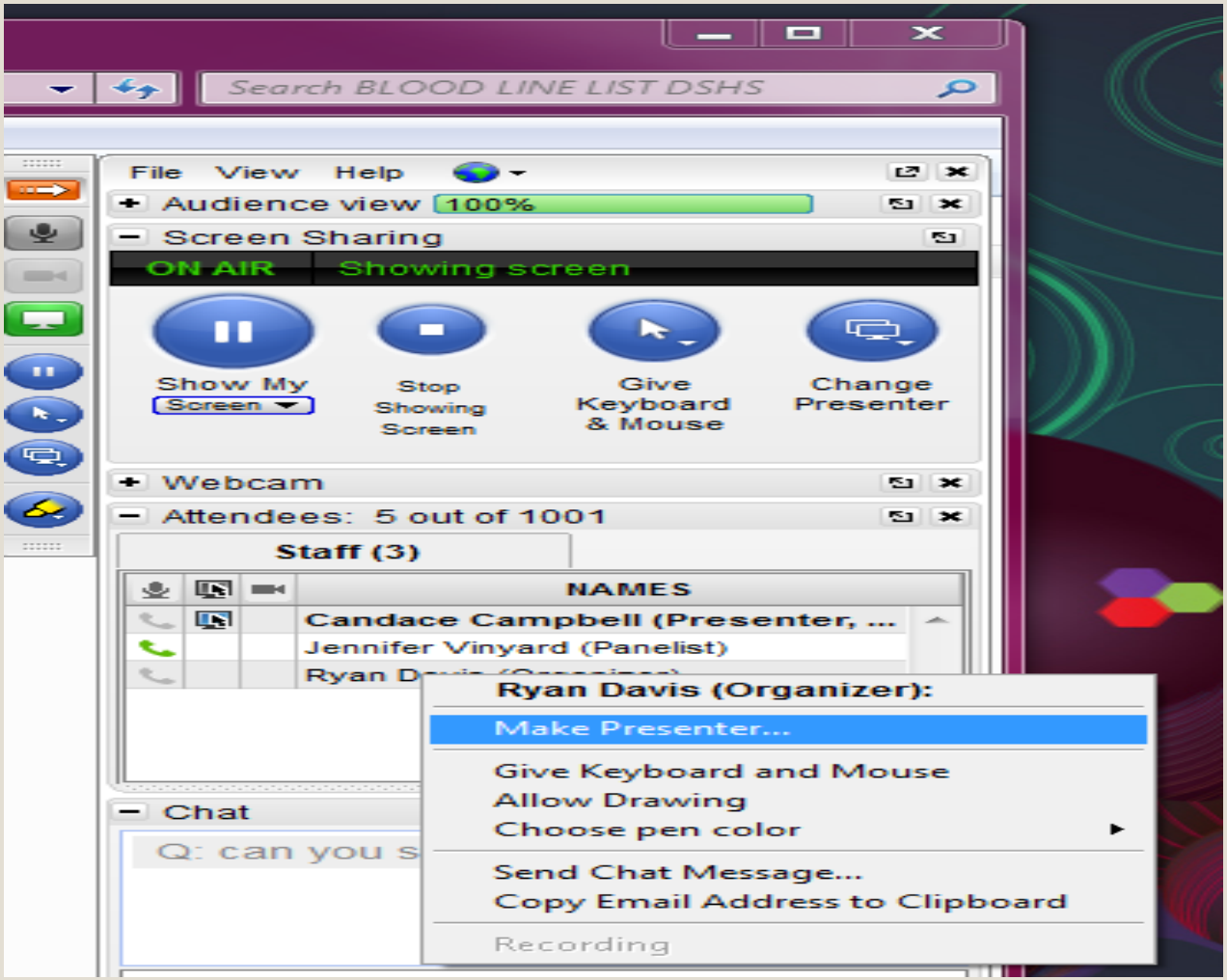
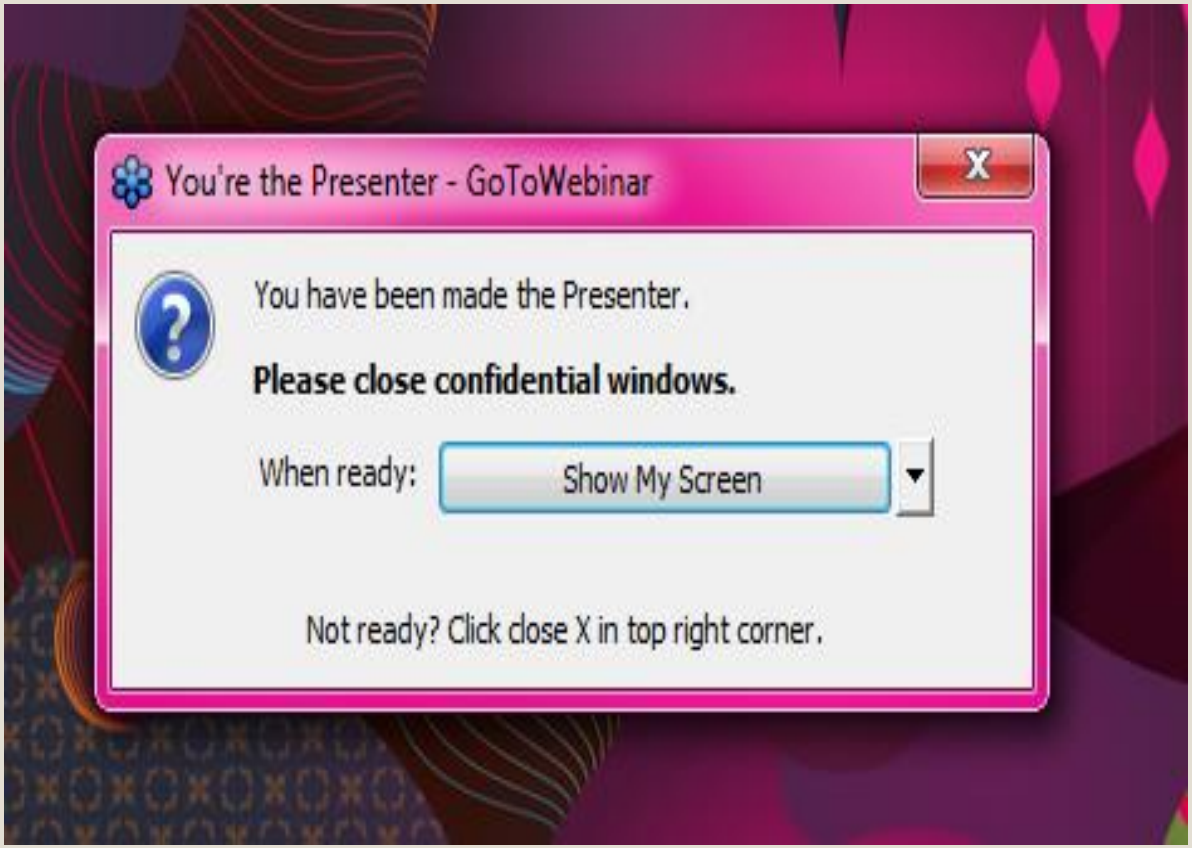
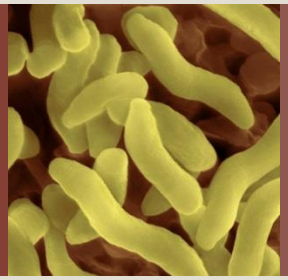
REMOTE AUDIT PROCESS



REMOTE AUDIT PROCESS

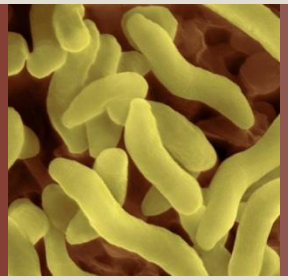




REMOTE AUDIT PROCESS

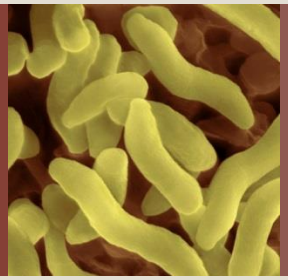
- Benefits
  - Reduces state expenses for travel
  - Allows DSHS to audit the recommended amount of facilities from NHSN
  - Convenient for facilities

HAI Data Validation



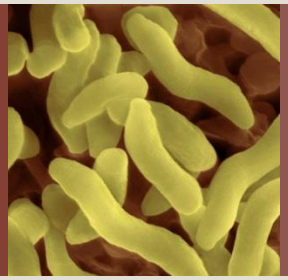
Data Validation: 2012-2014

- Audit data for 6 month period:
  - H1 (Jan – June)
  - H2 (July – Dec)
- Identify facilities based on Standardized Infection Ratio (SIR): If Statistically Significantly High
- 2 Audit Tiers:
  - First Time High SIR – no high SIR for same HAI for previous time period)
  - Subsequent High SIR – high SIR for same HAI for two reporting periods in a row



Data Validation: 2012-2014

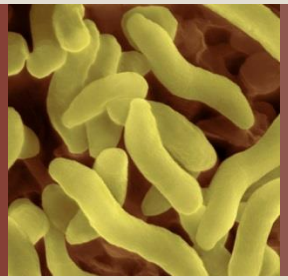
- First Time High SIR (SSI, CLABSI and CAUTI):
  - Purpose: To ensure **facility is applying the NHSN definitions correctly** and to verify the number of infections reported to DSHS.
  - Site visits for those facilities with significantly high SIRs to verify data reported meet NHSN HAI criteria
  - Conducted by Contracted Infection Preventionists (IPs)
  - Record Review & IP/Administration staff Interview



Data Validation Results: 2012-2014

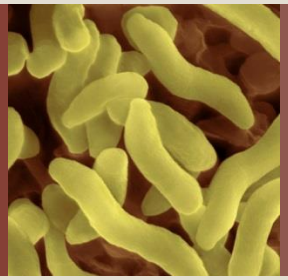
- 97-99% of events were reported accurately. Those responsible for reporting, mostly Infection Preventionists, had a good grasp of requirements and definitions.

- Found that facilities that were audited had very robust IP programs that were good at “finding” and identifying HAIs.



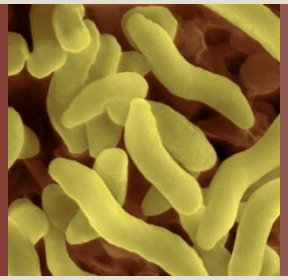
Data Validation: 2012-2014

- Subsequent High SIR Investigations (SSI, CLABSI & CAUTI):
  - Purpose: Once problem has been verified (from first time high SIR audit), **DSHS will aid facilities in prevention efforts** and provide consultation/support as needed.
  - Conducted by CIC certified HAI Epidemiologists
  - Phone consultation to review interventions taken and action plans in place at facility to determine if site visit is warranted
  - If site visit needed, CIC HAI Epidemiologist will come to facility and may perform environmental rounds, interview floor staff, observe procedures/patient care activities, review policies and patient records.



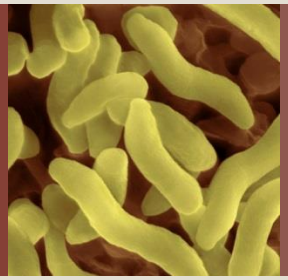
Requested Audit Enhancements

- Identify facilities who may be under-reporting (have no SIR or low SIRs)
- Target education and training to these facilities that need it most
- **Caveat: This type of validation is VERY time and resource intensive.**



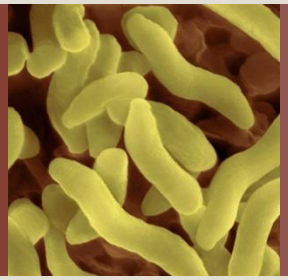
New CLABSI Validation Audit

- Facility selection process modeled after the NHSN CLABSI Validation Protocol
- CDC recommends targeted validation in order to investigate and correct potential deficiencies in an efficient manner.
- NHSN recommends 21 facilities be chosen via targeted selection and 5% of the remaining facilities selected randomly. For Texas, this is approximately 40 facilities.



Facility Selection: Details

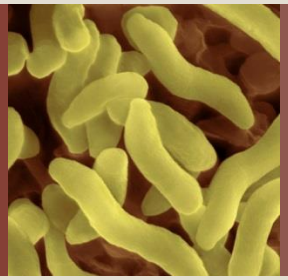
- 21 in the top 33% of facilities with highest number of expected infections are selected.
  - Top 7 facilities with SIRs above the median
  - Top 7 with SIRs at or below the median, but above 0
  - Top 7 with SIRs = 0
- 5% of all remaining facilities are randomly selected.



Record Selection

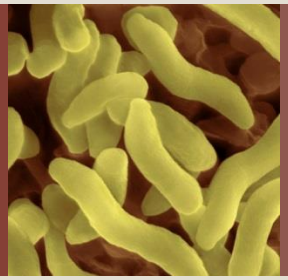
Selected facilities will be required to submit a line list of all positive blood cultures from the given audit period (6 months). Line list should include:

- MRN
- Gender
- DOB
- Admission Date
- NICU/ICU
- Name/Type of ICU (optional)
- Lab Specimen # (optional)
- Organism Name



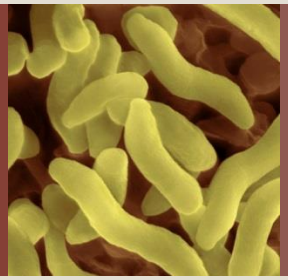
Record Selection

- From the line list, DSHS will select:
  - Up to 20 records of NHSN reported CLABSIs
  - 40 records of unreported candidate CLABSI events
    - 10 from NICU setting (if applicable)
    - 30-40 from adult/pediatric ICUs



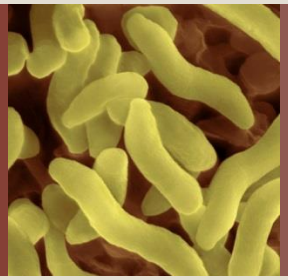
Consecutive Audits

- Facilities can be selected for audit during consecutive reporting time periods.
  - Facilities with 0 discrepancies for the previous time period will be omitted.
  - Facilities with discrepancies for the previous time period will be audited for the current time period.



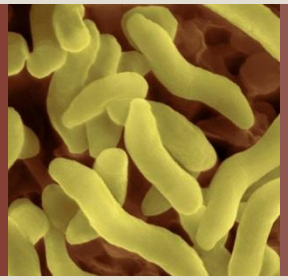
Consecutive Audits

- Examples
  - Your facility was audited for CLABSI for the Jan-June 2015 time period. DSHS found 1 discrepancy. If selected for CLABSI audit during the next time period, DSHS will audit your facility.
  - Your facility was audited for CLABSI for the Jan-June 2015 time period. No discrepancies were found during the audit. If selected for CLABSI audit, DSHS will NOT audit your facility for the new time period.



Summary of CLABSI Validation Process

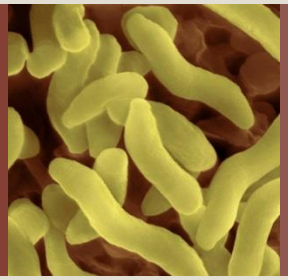
1. Notify facility and request line list of positive blood cultures
2. Select medical records for review and notify facility
3. Select site visit date and send Facility Audit Survey for completion by facility prior to site visit.
4. Notify CEO/Administrator, DSHS Regulatory and Regional/Local Health Departments about upcoming visit
5. Review Facility Audit Survey and perform site visit
   - Introductions/Entrance Interview
   - Partially “Blind” Chart Review
   - Debriefing/Conclusions
6. Send Validation Summary Report to IPs, CEO/Admin and other staff as needed.



2015 Validation Findings

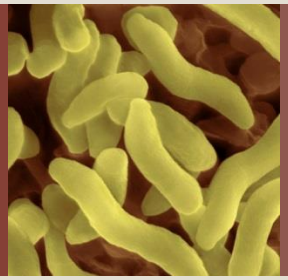
- CLABSI:
  - 1227 records reviewed for CLABSI
  - 50 (4.1%) Discrepancies noted
    - 41 (82% of discrepancies) were initially missed by the facility
- SSI:
  - 242 records reviewed for SSI
  - 12 (5%) Discrepancies noted
- CAUTI:
  - 43 records reviewed for CAUTI
  - 2 (4.7%) Discrepancy noted

Overall Reporter Reliability = 96%



2016 Data Audits

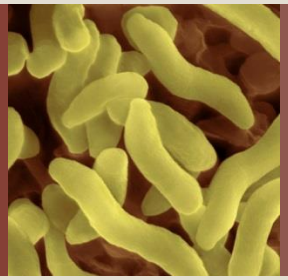
- DSHS to pilot CAUTI Validation Protocol for 10-12 facilities audited for H1 2016 data.
- Hope to expand to full CAUTI validation for ~36 facilities in H2 2016 data.
  - Expansion depends on available funds
- SSI will continue to be audited using high SIR facility selection process.



Changes to 2nd High SIR Investigations

- No longer use 2nd High SIR to identify facilities that may need consultation

- Use NHSN's Targeted Assessment for Prevention (TAP) report to target facilities with highest need for HAI prevention efforts

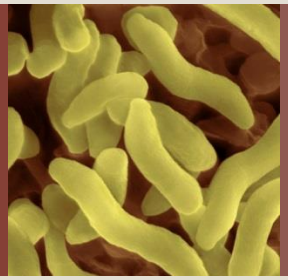


TAP Report Explained

- TAP Report - Targeted Assessment for Prevention (TAP) report rank orders facilities to identify and target those with the greatest need for improvement.

- Ranks facilities by the cumulative attributable difference (CAD), which is the number of infections that must be prevented to achieve a HAI reduction goal.

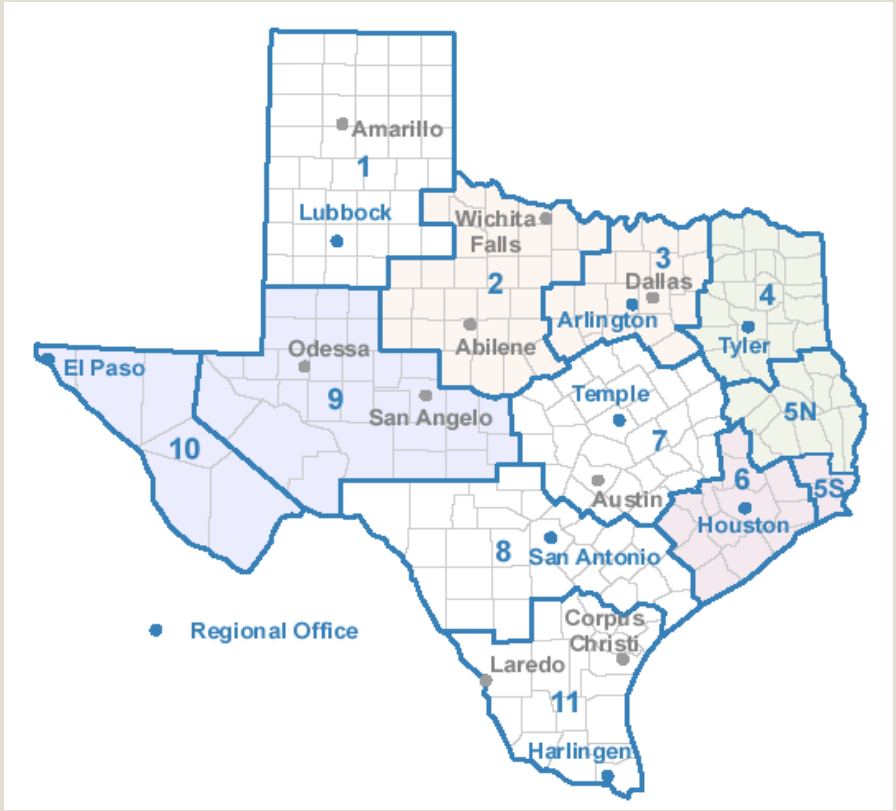
- Ranking occurs for overall Hospital CAD (highest to lowest) and by unit within the hospital.

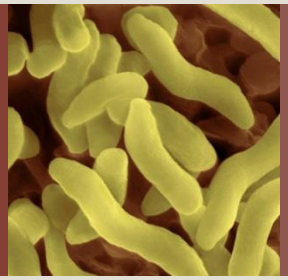


HAI Epidemiologist Investigations

Regional HAI Epidemiologists review TAP reports for facilities in their region:

- **1, 8, 9/10:** Jessica Ross
- **2/3:** Thi Dang
- **4/5N:** Annie Nutt
- **6/5S:** Bobbiejean Garcia
- **7:** Sandi Henley
- **11:** Melba Zambrano





Regional HAI Epi Follow-up Actions

- **Regional HAI Epi Follow up may include one or more of the following**:
  - Onsite Consultation/Site Visit
  - Phone Consultation
  - Review of Action Plans
  - Review of previous HAI data
  - Other

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Questions?

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