

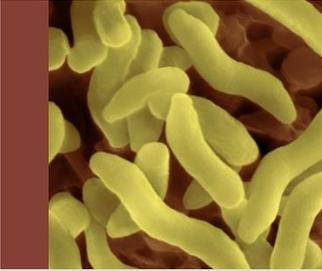
A vertical strip on the left side of the slide shows a microscopic view of various bacteria, including rod-shaped and spherical forms, some with flagella. The background of the slide is a light beige color with a subtle gradient.

# Texas Healthcare Associated Infection (HAI) Reporting and Validation

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# Objectives

1. Introduction to NHSN
2. Data Reports: SIR Explanation
3. Data Validation Process
4. New CLABSI Validation Protocol
5. Q & A

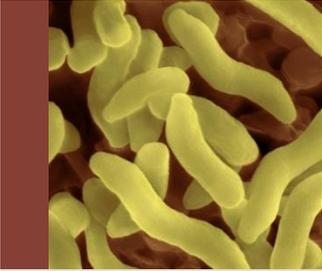


# Reporting Requirements

## ❖ Who is required to report?

- State-Operated/Maintained hospitals that provide surgical or obstetrical services
- Ambulatory Surgical Centers
  - Licensed under Chapter 243
- General Hospitals
  - Licensed under Chapter 241
  - **INCLUDES SOME LTACs and CAHs with ICU/CCU/NICU**

**DOES NOT INCLUDE COMPREHENSIVE MEDICAL REHABILITATION HOSPITAL**



# 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)**

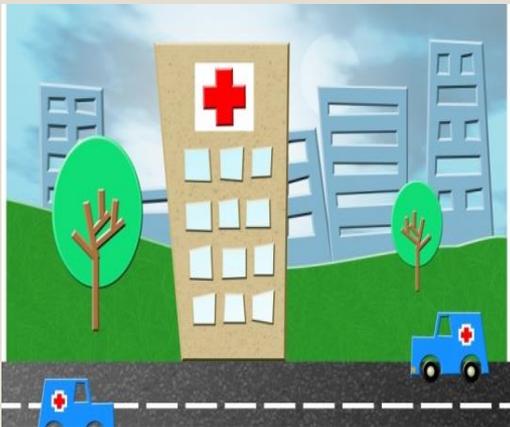
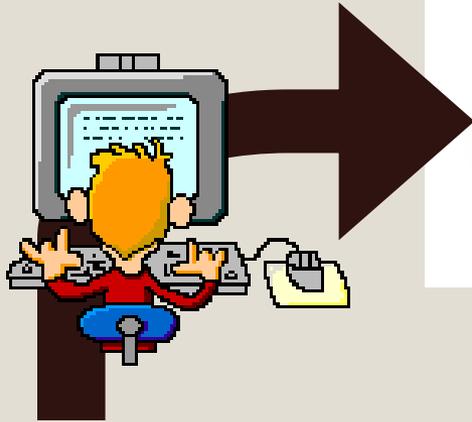
- **CHILDREN'S HOSPITALS:** Cardiac procedures, heart transplants, spinal surgery with instrumentation, and VP shunt procedures
- **ALL OTHER GENERAL HOSPITALS & ASCs:** Colon surgeries, hip & knee arthroplasties, abdominal & vaginal hysterectomies, vascular procedures, and coronary artery bypass grafts

# 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
	<i>C. difficile</i> LabID Event	FacWideIN	January 2013
	Healthcare Personnel Influenza Vaccination	All Inpatient Healthcare Personnel	January 2013
	Medicare Beneficiary Number	All Medicare Patients Reported into NMSN	July 2014
	CLABSI	Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards	January 2015
	CAUTI	Adult & Pediatric Medical, Surgical, & Medical/Surgical Wards	January 2015

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

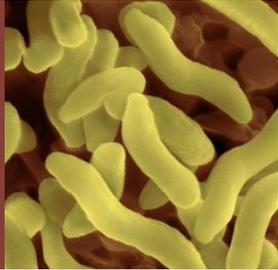
# HAI Reporting Overview



**Alerts regarding data & reports**

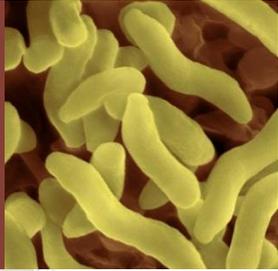
**View reports & make comments**





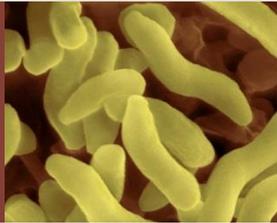
# What is NHSN?

- NHSN is a secure internet based surveillance system that was created and is maintained by the Division of Healthcare Quality Promotion (DHQP) at CDC
- Provides a tool for healthcare facilities to collect information about healthcare-associated infections (HAIs) and other adverse patient events using...
  - Standardized protocols
  - Standard definitions
  - Forms
  - Analysis with comparative national data
  - Outcome and process measures for performance improvement



# When Do We Report?

Texas HAI Reporting Deadlines				
Reporting Quarter	Jan 1 – Mar 31	April 1 – June 30	July 1 – Sept 30	Oct 1 – Dec 31
Facility Data submission deadline	According to NHSN rules: within 30 days of end of reporting month			
Departmental data reconciliation (DSHS pulls data from NHSN)	1-Jun	1-Sep	1-Dec	1-Mar
Facility NHSN data corrections due in NHSN	30-Jun	30-Sep	31-Dec	31-Mar
DSHS sends email to facilities to review data summary	NA	15-Oct	NA	15-Apr
Facility comment deadline: Facilities will have until this date to enter a comment related to their facility's data display	NA	30-Oct	NA	30-Apr
DSHS review of comments: DSHS will review comments by this date	NA	15-Nov	NA	15-May
Public posting of summary: Public Data Display will be posted on a public website	NA	1-Dec	NA	1-Jun



# HAI Reports:

<http://txhsn.dshs.texas.gov/hai/>



[HAI Home](#)

[HAI Data Home](#)

[Annual Reports](#)

[Acronyms](#)

[Definitions](#)

[Understanding the Data](#)

[Frequently Asked Questions](#)

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## 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](#)

City contains this text    City begins with this text

# 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).

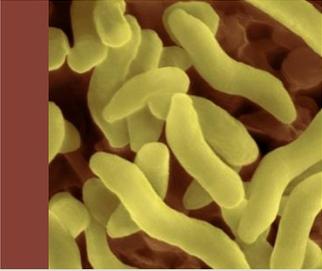
### Central Line-Associated Bloodstream Infection (CLABSI) Standardized Infection Ratio (SIR)

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	 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 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	 Significantly more infections observed than predicted, based on the 2009 national baseline	0

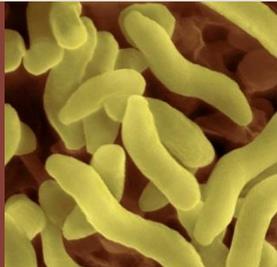


# Data Validation: 2012-2014

- Audit data for 6 month period:
  - H1 (Jan – June)
  - H2 (July – Dec)
- Identify facilities based on Standardized Infection Ratio: 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

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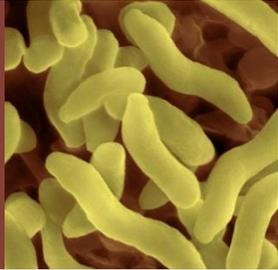
# Data Validation: 2012-2014

- First Time High SIR (SSI, CLABSI and CAUTI):
  - Purpose: To ensure **facility is applying the CDC 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



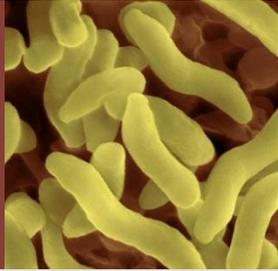
# Data Validation: 2012-2014

- 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.



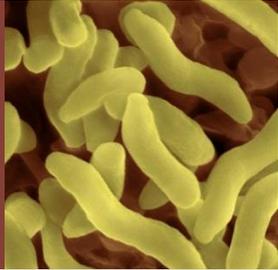
# First Time High SIR Audit Process

- ❖ Facility notification (via IP contacts) and list of MRs for review
- ❖ RHD/LHD Notification
- ❖ HAI Survey completed by Facility (general data collection questions)
- ❖ Audit
  - Initial Interview – Introductions/Explanation
  - MR Review
  - Exit Interview
- ❖ Summary Report Sent to IP and CEO (and RHD/LHD if requested)



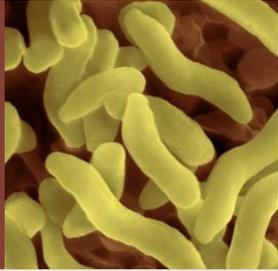
# First Time High SIR Audit Results: 2012-2014

- 97% 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.



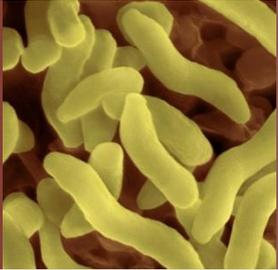
## Next Steps:

- ❖ 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.**



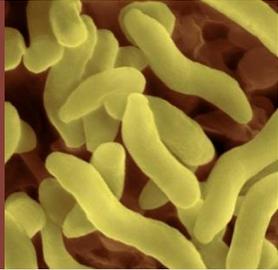
# New Way of Validation

- 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.
  - **During the pilot phase of this protocol:**
    - **8 targeted facilities**
    - **~4 (1%) facilities randomly selected facilities will be audited.**
  - **After the pilot, this will be re-evaluated to determine time requirements based on available resources.**



# Facility Selection: Details

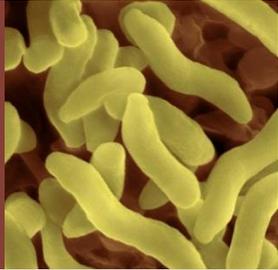
- 6 in the top 33% of facilities with highest number of expected/predicted infections are selected.
  - Top 2 facilities with SIRs above the median
  - Top 2 with SIRs at or below the median, but above 0
  - Top 2 with SIRs = 0
- The top 2 facilities without a calculated SIR that have the largest difference between expected and observed infections.
- 1% of all remaining facilities are randomly selected.



# Record Selection

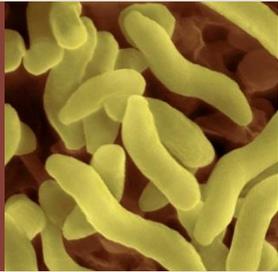
Selected facilities will be required to submit a line list of all positive blood cultures from the given audit period (6 months). Line list should include:

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



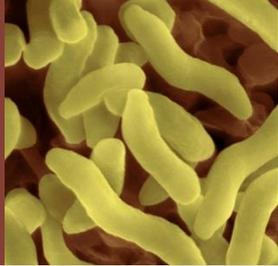
# Record Selection

- ❖ 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



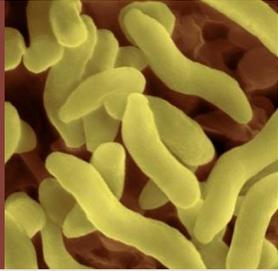
# Summary of CLABSI Validation Process

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
  - Chart Review
  - Debriefing/Conclusions
6. Send Validation Summary Report to IPs, CEO/Admin and other staff as needed.



# 2015 Validation Overview

- ❖ First Time High SIRs: This will remain the same for SSI and CAUTI
- ❖ Subsequent High SIRs: This will remain the same for SSI and CAUTI
- ❖ NEW CLABSI Validation: Only for CLABSI but hope to expand to other HAIs in the future (CAUTI/SSI to begin with 2016 data)
- ❖ Subsequent High SIR CLABSI: TBD



# Current DSHS Validation Team



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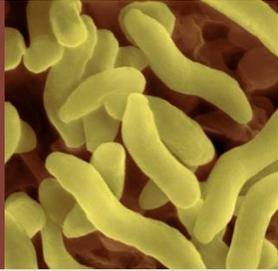


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# Questions?



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