

# Local Health Department Access to the National Healthcare Safety Network

January 23, 2018

# Learning Objectives

- Describe the National Healthcare Safety Network (NHSN), its functions, and uses
- Identify upcoming changes to data use agreements and how these changes could impact access to NHSN data
- Explain how two local health departments gained access to NHSN data, lessons learned, strategies for success, and current and future uses for the data.
- Explore how other local health departments may use NHSN data for prevention

# Polling Questions



# Lauren Wattenmaker, MPH

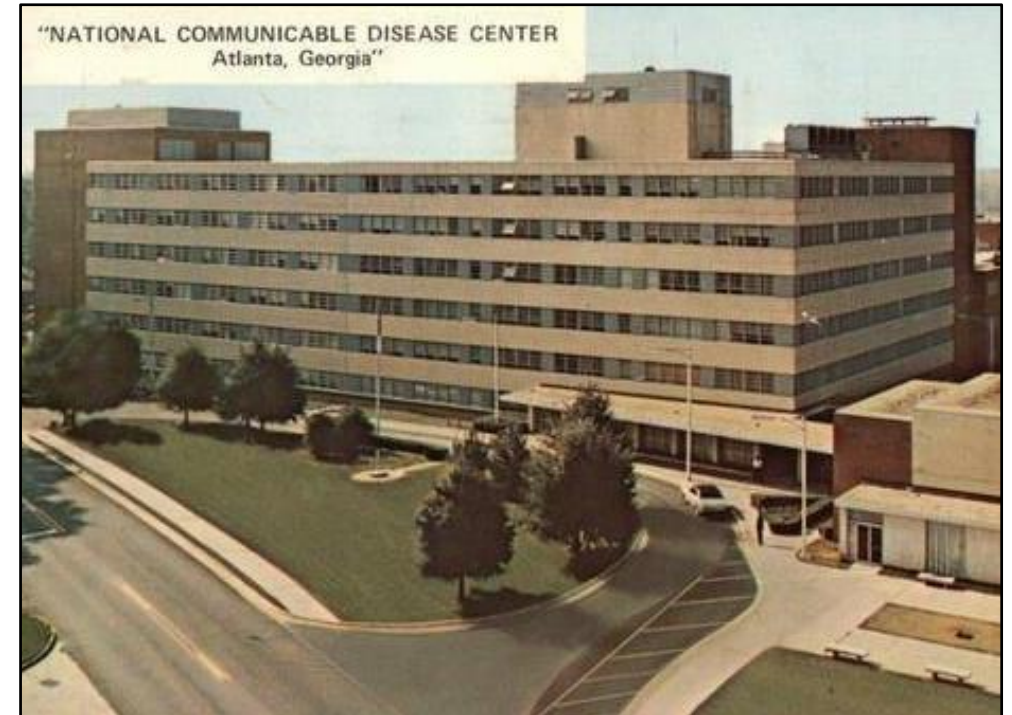
Team Lead, NHSN Policy and Operations, Surveillance Branch, DHQP, NCEZID, CDC

# Objectives

- Describe the National Healthcare Safety Network (NHSN), its functions, and uses
- Identify upcoming changes to data use agreements and how these changes could impact access to NHSN data

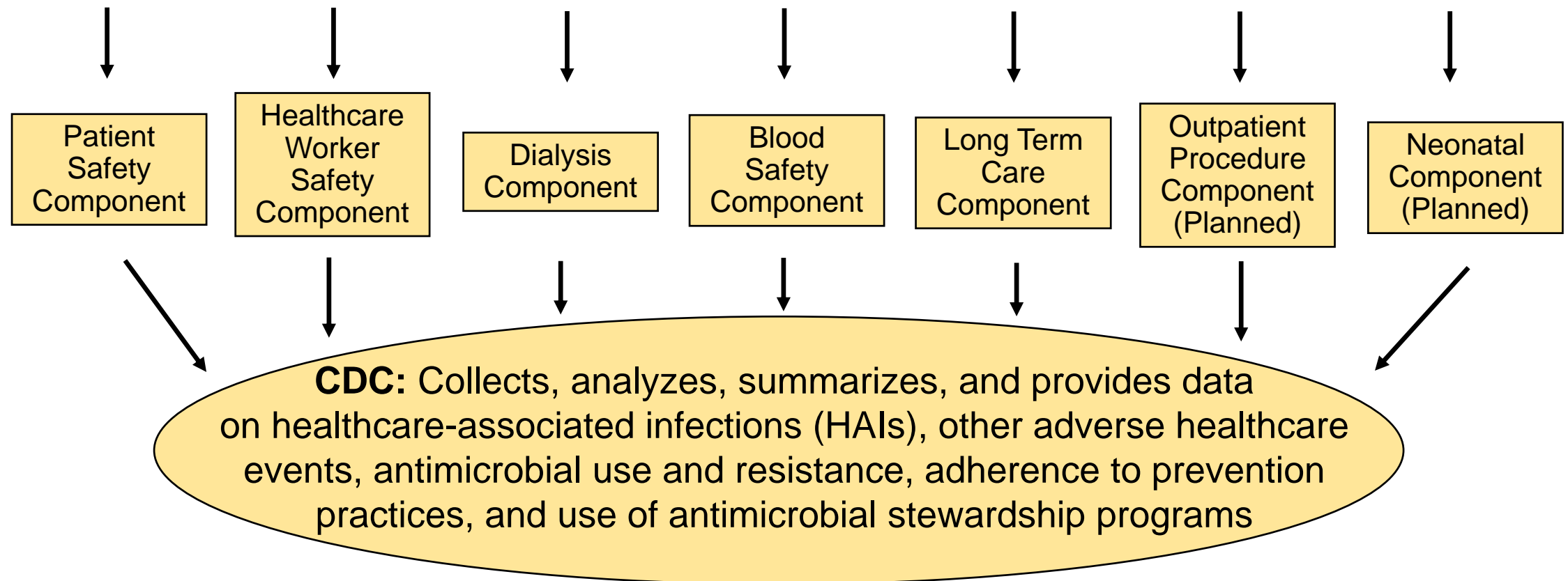
# A Brief History of CDC's Role in Disease Surveillance and Healthcare Surveillance

- Malaria, in 1950, became the first disease that CDC – then the Communicable Disease Center – brought under national surveillance
- By 1970, CDC had worked with state and local health departments to establish surveillance of nearly 30 communicable diseases, with approximately 60 diseases added since then
- CDC's first system for surveillance of healthcare-associated infections (HAIs) was launched in 1970, when hospitals began reporting to the National Nosocomial Infection Surveillance (NNIS) system
- In 2005, CDC replaced the NNIS system with the National Healthcare Safety Network (NHSN), a healthcare surveillance system in which approximately 21,000 U.S. healthcare facilities currently participate



# CDC's NHSN – A Web-Based Healthcare Surveillance System

**Healthcare facilities:** (1) Join NHSN, (2) complete an annual survey of their care capacities, (3) submit process and outcome data manually or electronically to one or more NHSN components, and (4) use their own data and NHSN benchmarks for analysis and action





## A CDC Surveillance System With Multiple Users and Uses

**Facilities:** Use NHSN's tools to analyze their own data, compare their summary statistics to national benchmarks, and apply their analyses to prevention efforts and antimicrobial stewardship

**CDC:** Uses healthcare-associated infection (HAI), antimicrobial use, and related data for surveillance and prevention purposes

**Centers for Medicare and Medicaid Services (CMS):** Uses facility-level, healthcare quality measure data in its public reporting and payment programs

**36 states and Washington, DC:** Require facilities to report to NHSN; most state and local agencies publicly disclose facility-specific data and use the data in prevention programs



# The HAIs Reported to NHSN Account for Substantial Morbidity and Mortality



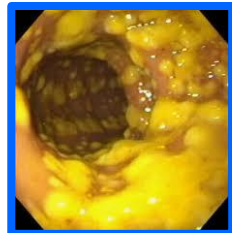
Central line associated bloodstream infections (CLABSIs)

Surgical site infections (SSIs)



Ventilator associated events (VAEs)

Bacteremia in dialysis patients

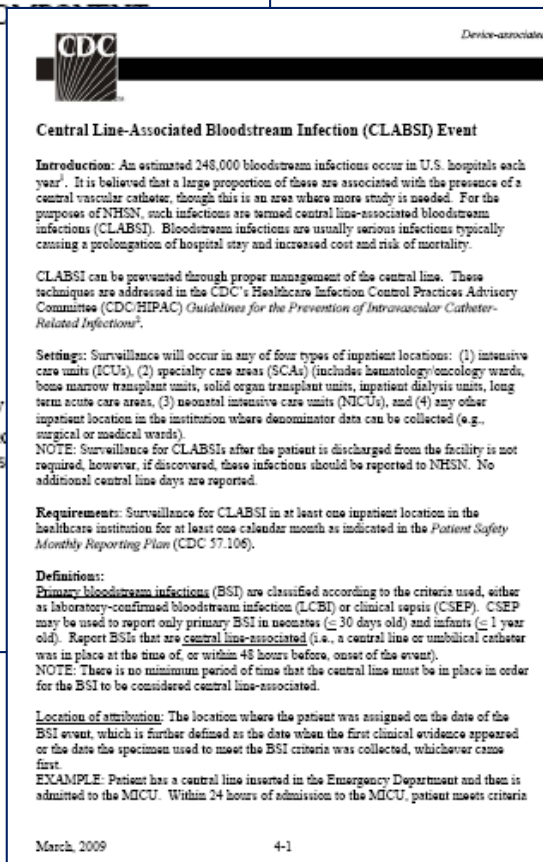
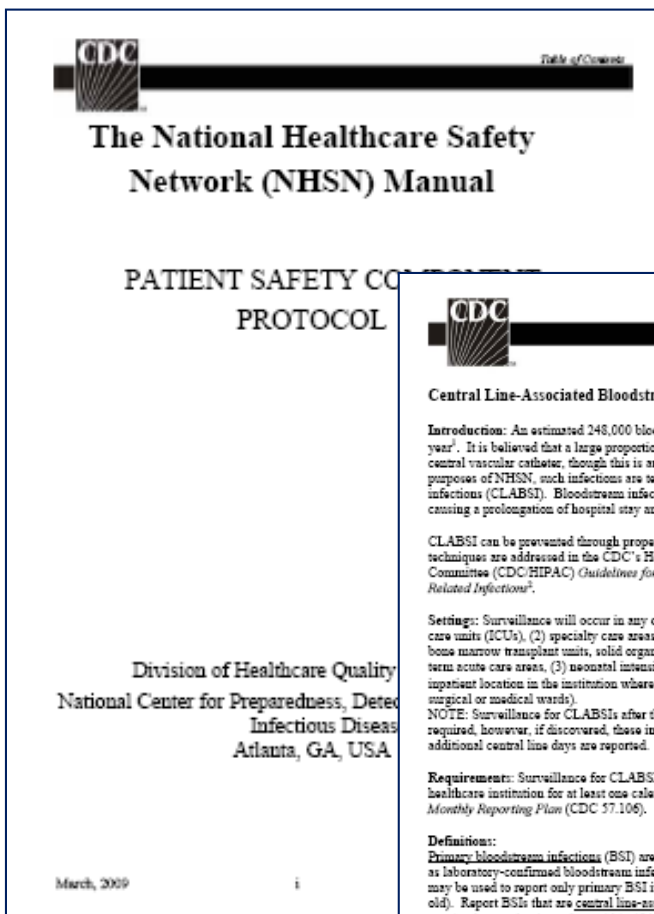


*Clostridium difficile* laboratory identified events

Catheter associated urinary tract infections (CAUTIs)



# NHSN Protocol and Data Collection Form



**NHSN** **Primary Bloodstream Infection (BSI)** CHS No. 0620-009 Rev. Date: 09-21-2011

Page 1 of 3

*Required for saving **required for completion		Event #:
Facility ID:	Social Security #:	
*Patient ID:	Secondary ID:	
Patient Name, Last:	First:	Middle:
*Gender: F M	*Date of Birth:	
Ethnicity (specify):	Race (specify):	
*Event Type: BSI	*Date of Event:	
Post-procedure BSI: Yes No	Date of Procedure:	
NHSN Procedure Code:	ICD-9-CM Procedure Code:	
*MRO Infection: Yes No	*Date Admitted to Facility:	*Location:
<b>Risk Factors</b>		
*If ICU/Other locations, Central line: Yes No	Location of Device Insertion: _____	
*If Specialty Care Area,	Permanent central line: Yes No	Date of Device Insertion: ___/___/___
Temporary central line: Yes No		
*If NICU,	Non-umbilical Central line: Yes No	
Umbilical catheter: Yes No		
Birth weight (grams):		
<b>Event Details</b>		
*Specific Event:		
<input type="checkbox"/> Laboratory-confirmed <input type="checkbox"/> Clinical sepsis		
*Specify Criteria Used:		
<b>Signs &amp; Symptoms (check all that apply)</b>		<b>Laboratory (check one)</b>
Any patient <input type="checkbox"/> $\leq 1$ year old		<input type="checkbox"/> Recognized pathogen from one or more blood cultures
<input type="checkbox"/> Fever	<input type="checkbox"/> Fever	<input type="checkbox"/> Common skin contaminant from $\geq 2$ blood cultures
<input type="checkbox"/> Chills	<input type="checkbox"/> Hypothermia	<input type="checkbox"/> Blood culture not done <u>or</u> no organisms detected in blood
<input type="checkbox"/> Hypotension	<input type="checkbox"/> Apnea	
	<input type="checkbox"/> Bradycardia	<b>Clinical Diagnosis (CSEP only)</b>
		<input type="checkbox"/> Physician institutes appropriate antimicrobial therapy
**Died: Yes No	BSI Contributed to Death: Yes No	
Discharge Date:	*Pathogens Identified: Yes No *If Yes, specify on page 2	

Consent of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with agreement that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution or association with Section 505, 506 and 507(a) of the Confidential Source and Use (CSU) Act, 42 CFR 101.11. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and reviewing and reporting the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Burden Office, 1601 Clifton Road, NE, Atlanta, GA 30333, 2-29. Also, 2009-07-06.

# HAI Data Submitted to NHSN are Entered into a CDC Database and Are Available for Immediate Analysis by NHSN Users

## Healthcare Facility

NHSN 1.3.2 NHSN Event - Windows Internet Explorer provided by ITSO

https://sdn7.cdc.gov/nhsn/eventaction.do?method=showpage&mode=add&clear=1&subaction=event2nav&res=...

Department of Health and Human Services  
Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network

NHSN Home | My Info | Contact us | Help | Log Out

Logged into DHQP Memorial Hospital (ID 10000) as JDE  
Facility DHQP Memorial Hospital (ID 10000) is following PS component.

### Add Event

Mandatory fields marked with \*  
Fields required for record completion marked with \*\*  
Fields required when in Plan marked with >

Print PDF Form

**Reporting Plan**

**Patient**

Event

□ Add  
□ Find  
□ Incomplete

**Procedure**

**Summary Data**

**Analysis**

**Surveys**

**Users**

**Facility**

**Group**

**Log Out**

**Patient Information**

Facility ID\*:  Event #: 973765

Patient ID\*:

Social Security #:  Secondary ID:

Last Name:  First Name:

Middle Name:

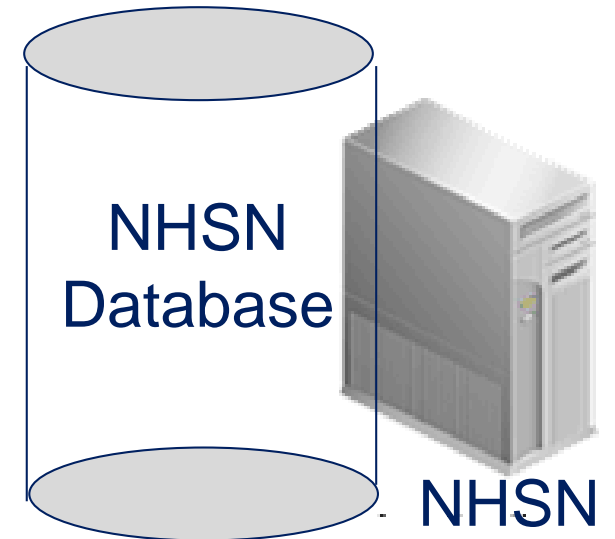
Gender\*:  Date of Birth\*:

Ethnicity:

Data Submission



CDC



Data Analysis



National Healthcare Safety Network  
SIR for In-Plan Central Line-Associated BSI Data - By OrgID  
As of: August 10, 2011 at 4:57 PM  
Date Range: All CLAB\_RATESALL  
if (((bsiPlan = "Y" )))

Org ID=14553

Org ID	Summary Yr/Half	infCount	Number Expected	Central Line Days	SIR	SIR p-value	95% Confidence Interval
14553	2010H1	6	3.626	1546	1.655	0.1594	0.607, 3.602
14553	2011H1	0	0.115	50	.	.	

## NHSN Web-based Application

# CDC HAI-AR Programs in States

- All 50 state health departments, 6 local health departments and Puerto Rico using HAI/AR programs to detect, respond and prevent to HAI/AR threats across healthcare settings
- State HAI/AR programs play an important role to facilitate public health and healthcare partnerships to ensure the successful prevention of infections

## Tennessee Example


Alignment Grid 2014

Organization/ Initiative	CLABSI	CAUTI	CDI	MRSA	SSI	Care Transitions/ Readmissions
Tennessee Hospital Association (THA)/ Tennessee Center for Patient Safety (TCPS)*	✓	✓			✓	✓
Qsource			✓		✓	✓
Tennessee Department of Health (TDH)	✓	✓	✓	✓	✓	
Tennessee Initiative for Perinatal Quality Care (TIPQC)	✓ (NICU)					
CMS Partnership for Patients Hospital Engagement Network (HEN)s	✓	✓			✓	✓
Centers for Medicare & Medicaid Services Inpatient Prospective Payment System (CMS IPPS)	✓	✓	✓	✓	✓	✓
CMS Hospital-Acquired Condition (HAC)/ Penalty Programs	✓	✓				

\* Includes Hospital Engagement Network (HEN)

**KEY**  
 CAUTI = Catheter-Associated Urinary Tract Infection  
 CDI = Clostridium difficile Infection  
 CLABSI = Central Line Associated Bloodstream Infection  
 CLIP = Central-Line Insertion Practice  
 MRSA = Methicillin-Resistant Staphylococcus aureus  
 NICU = Neonatal Intensive Care Unit



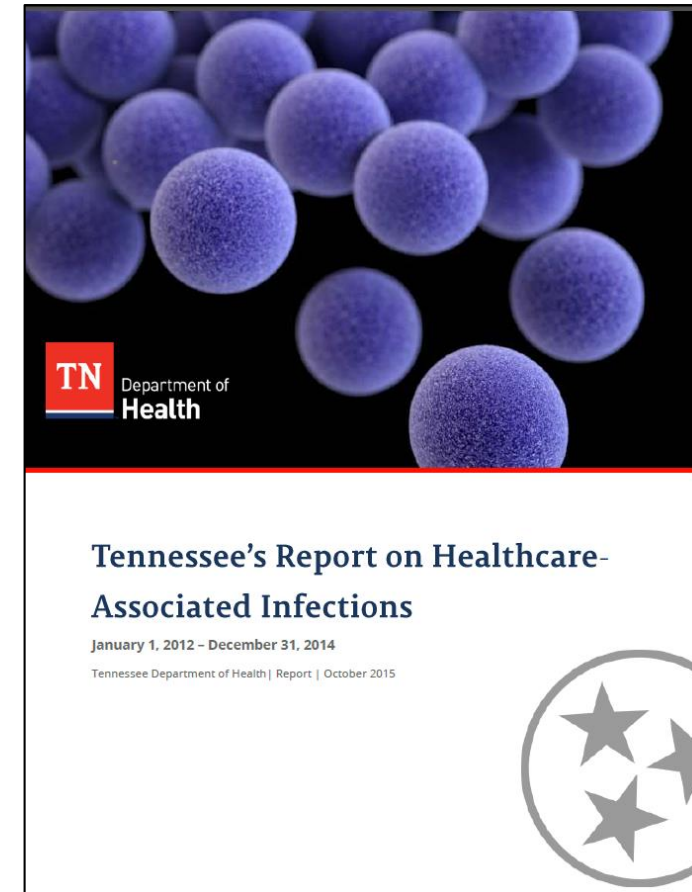
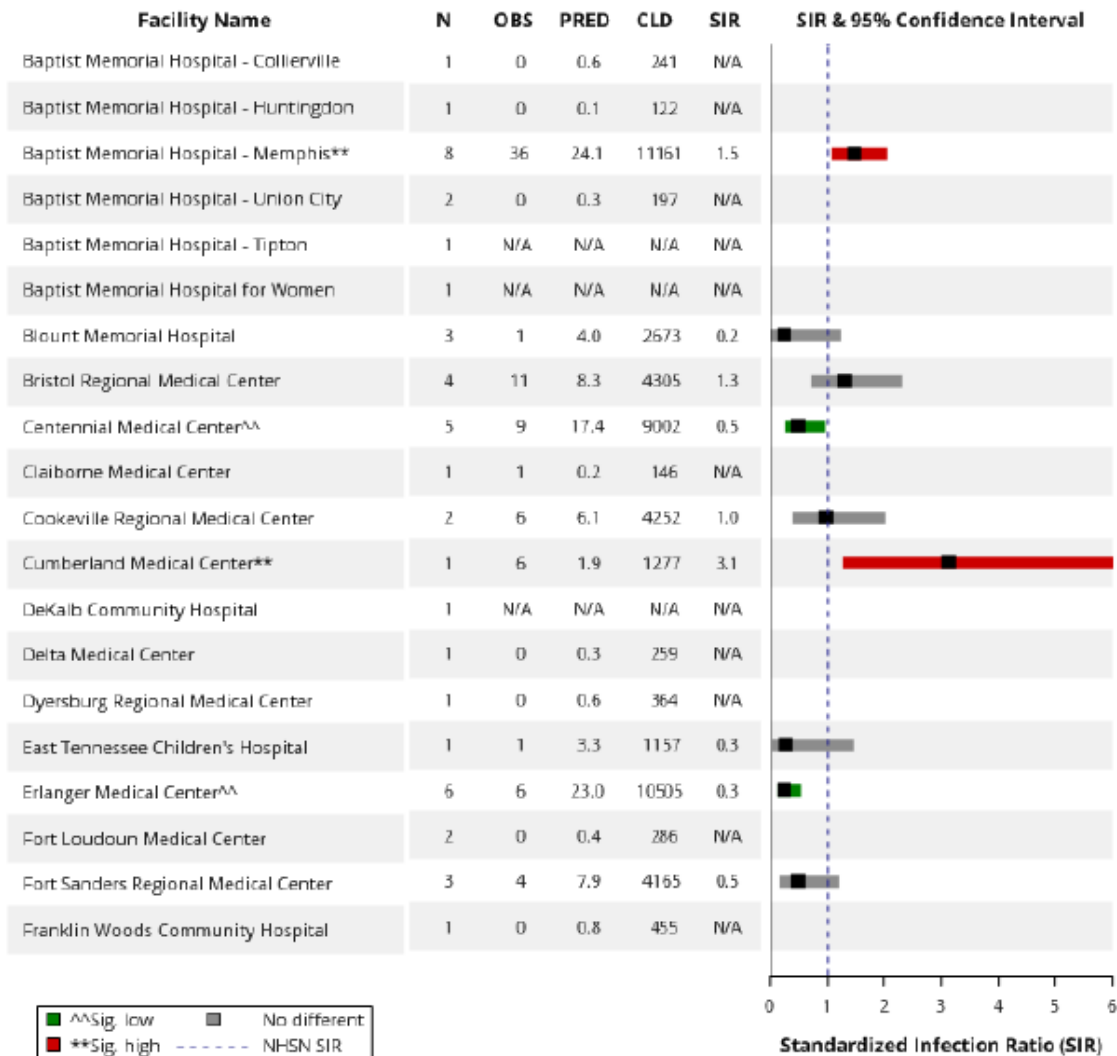



Developed by Tennessee Hospital Association, Quality Improvement Organizations (QIO) for Tennessee, and in partnership with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Content is not intended to be used for any other purpose.



# Public Reporting of HAI Data in Tennessee

Figure 11: CLABSI Standardized Infection Ratio (SIR) for Adult and Pediatric Intensive Care Units in Acute Care Facilities, Tennessee, 01/01/2014 - 12/31/2014



[https://tn.gov/assets/entities/health/attachments/TN\\_HAI\\_Report\\_Technical\\_October\\_2015.pdf](https://tn.gov/assets/entities/health/attachments/TN_HAI_Report_Technical_October_2015.pdf)

# California's Interactive HAI Map – 2015 data



Skip to: [Content](#) | [Footer](#) | [Accessibility](#)

- Home
- Programs
- Services
- Health Information
- Certificates & Licenses
- Publications & Forms
- Data

## My Hospital's Infections

Search Hospital Name or City

- Hospital Profile
- CDI
- CLABSI
- MRSA
- VRE
- SSI



San Francisco Bay Area  
Los Angeles Area

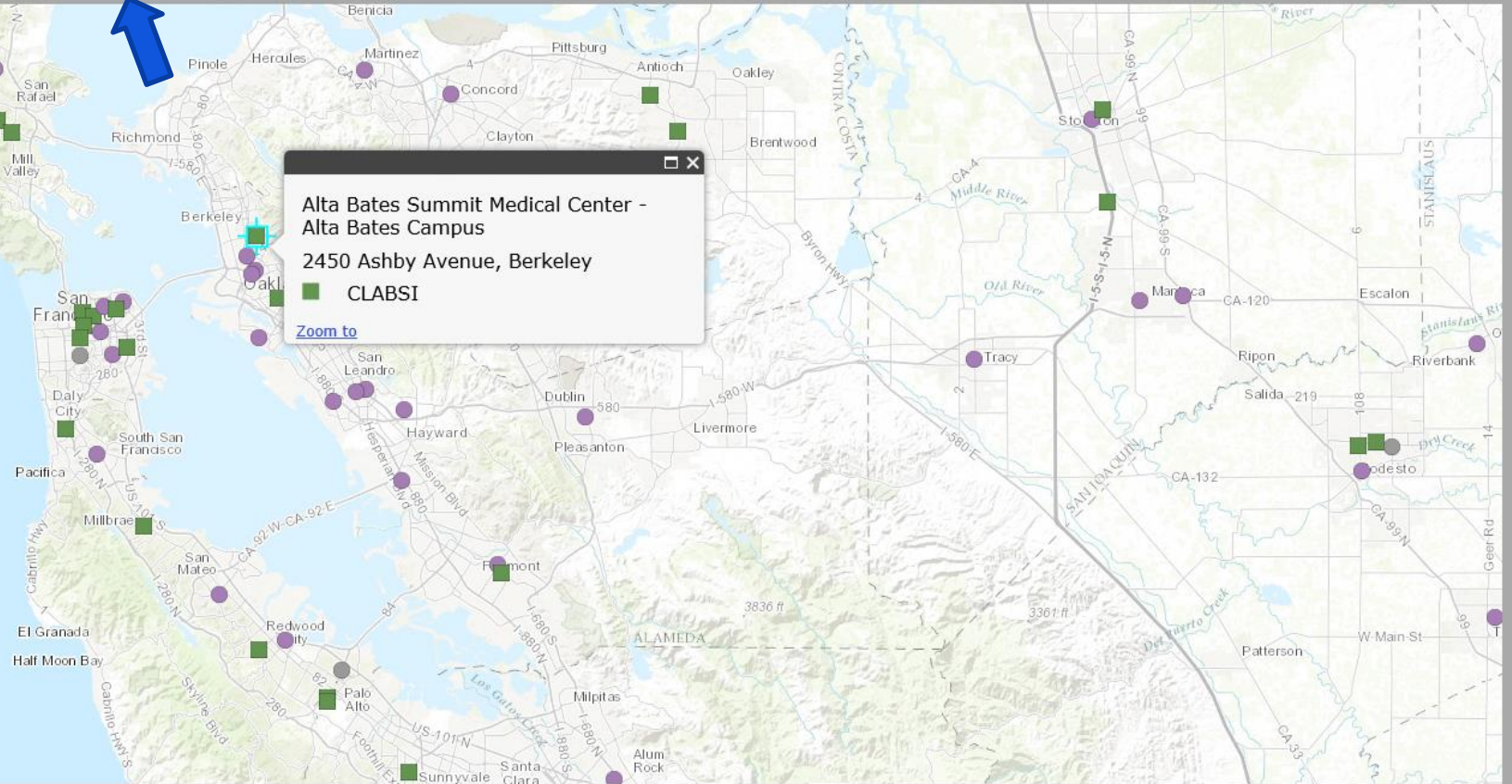
Alta Bates Summit Medical Center -  
Alta Bates Campus  
2450 Ashby Avenue, Berkeley  
■ CLABSI  
[Zoom to](#)

**LEGEND**

Hospital infection rates for CDI, CLABSI, MRSA BSI, and SSI are compared with the U.S. national average (baseline) rates. Hospital VRE BSI rates are compared with California average rates.

■ Lower is better.

- LOWER infection rate than other similar hospitals
- SAME infection rate as other similar hospitals
- ▲ HIGHER infection rate than other similar hospitals
- Not enough data for comparison



# Data for Action: Local Health Departments

## Public Health

CITY OF PHILADELPHIA  

---

LIFE • LIBERTY • AND YOU™



COUNTY OF LOS ANGELES

## Public Health

## Houston

### STATE OF HEALTH

Informing Action with Health Data



# Targeted Assessment for Prevention (TAP) Strategy

Target → Assess → Prevent

- Target facilities/units with high burden/excess of HAIs
- Assess gaps in infection prevention in targeted facilities/units
- Prevent infections by implementing interventions to address the gaps

The screenshot shows a web-based calculator interface for the TAP strategy. It features the following elements:

- HAI:** A dropdown menu set to "CAUTI".
- Target SIR:** A text input field containing "0.75".
- Number of Infections:** A text input field containing "67".
- Number Predicted:** An empty text input field.
- OR- Current SIR:** A text input field containing "1.3".
- Buttons:** "Compute" and "Clear Form".
- Result:** A message box stating "Need to prevent 29 infections to reach target SIR of 0.75".

*A linear progression framework for quality improvement*



# NHSN AND HEALTH DEPARTMENTS

- Since 2006, CDC has enabled state health departments in states with mandatory HAI reporting requirements to gain access to mandatorily reported data in their jurisdiction.
  - To date, 36 states, Philadelphia and Washington D.C. use NHSN for that purpose.
- Since 2011, States that do not have a mandate for HAI reporting, or that seek to complement their mandate with additional data, can also access data in NHSN by entering into a Data Use Agreement (DUA) with CDC and using the NHSN group function.
  - To date, CDC has a DUA with ten states.

# THE DATA USE AGREEMENT (DUA)

Stipulates the data will be used solely for surveillance and prevention purposes and not for public reporting of facility-specific data or any regulatory or punitive actions against facilities, such as a fine or licensure action.

[State Department of Health] acknowledges that CDC/NHSN will provide a time-limited opportunity for healthcare institutions participating in NHSN in their jurisdiction to opt out of reporting COVERED DATA to NHSN.

**DATA PROTECTIONS**

CDC's legal authorities to obtain COVERED DATA from healthcare institutions are 42 U.S.C. section 241(a) (Public Health Service Act section 301(a)), pertaining to CDC's broad public health authority to conduct research and investigations, and 42 U.S.C. section 242k (Public Health Service Act section 306), pertaining to the collection of statistical data. CDC's authority to keep the COVERED DATA is derived from 42 U.S.C. section 242m (Public Health Service Act section 306a) and 42 U.S.C. §§552 and 552a.

**Data Use Agreement**  
**Between**  
[State Department of Health]  
**And**  
Centers for Disease Control and Prevention ("CDC"), National Healthcare Safety Network ("NHSN")

The [State Department of Health] and CDC/NHSN enter into this Data Use Agreement (the "Agreement") effective [Effective Date]. CDC/NHSN and the [State Department of Health] shall be referred to individually as a "Party," or collectively as the "Parties."

This Agreement establishes a formal data access and data use relationship between CDC/NHSN and the [State Department of Health]. This Agreement covers individual- and institution-identifiable data received by the CDC/NHSN subject to the Federal Privacy Act, 5 USC §§552 and 552a, from the NHSN Patient Safety Component and Healthcare Personnel Safety Component as listed in the attached document that have been voluntarily submitted to NHSN by healthcare institutions in [State] and for which there is no State mandate for reporting of such individual- or institution-identifiable data ("COVERED DATA"). However, COVERED DATA shall NOT include data pertaining to federal or tribal healthcare institutions.

The Parties shall abide by all applicable Federal and State laws, rules, and regulations including, without limitation, all patient confidentiality and medical record requirements and any applicable Institutional Review Board ("IRB") requirements.

**STATE'S USES OF COVERED DATA**

[State Department of Health] agrees to use the COVERED DATA for surveillance and/or prevention purposes only (e.g., evaluating the impact of a targeted program to reduce central line-associated bloodstream infections). [State Department of Health] specifically agrees not to use the COVERED DATA obtained under this data use agreement for purpose of public reporting of institution-specific data or any regulatory or punitive actions against healthcare institutions, such as a fine or licensure action. The Parties acknowledge that COVERED DATA is limited to those data specified in the attached document, which identifies the complete set of data items, e.g., facility survey data, central line associated bloodstream infection numerator data, that [State Department of Health] will have access to as a result of this Agreement.

[State Department of Health] agrees to designate an NHSN Group Administrator and CDC/NHSN agrees to grant the State's designated NHSN Group Administrator access to the State's COVERED DATA. In the event that the NHSN Group Administrator leaves that role prior to assigning a replacement via the NHSN application, CDC/NHSN requires notification in writing on official letterhead from the signatory or the signatory's successor to assure continuity.

- The designated NHSN Group Administrator for [State Department of Health] is [Insert Name, Title, Email, City and State].

[State Department of Health] agrees that access to individual- and institution-identifiable data provided under the terms of the Agreement will be limited solely to department staff or contractors who are explicitly authorized to use those data for surveillance and/or prevention purposes only.

Final Version – 09/01/2011

1

2

3

N will notify newly enrolling institutions of institutions will have full knowledge of how [State Department of Health] and can opt out of providing [State Department of Health] is use other than surveillance and prevention. [State Department of Health] must delete than one year of the conclusion of this COVERED DATA in its files. at they have read, understand, and agree to CDC/NHSN Director, CDC Division of Healthcare Quality Promotion Date

# Extension of Data Access to Local Health Departments

- Currently there are several large local health departments that receive Epidemiology Laboratory Capacity (ELC) funding from CDC
- NHSN access will greatly benefit Health Department efforts to track and manage ELC activities at the state and local level.
- Health Departments will better be able to assess the gaps in infection prevention using TAP reports
  - Identify locations to target using the TAP Report
  - Aim to capture awareness and perceptions among facility staff and healthcare personnel related to prevention policies and practices
  - Assess potential gaps in infection control using the Facility Assessment Tools

## Leveraging DUAs for More Access

- The DUA can provide health departments with access to data that currently are outside the scope of most state and federal reporting mandates, such as Antimicrobial Use and Resistance data.
- CDC currently has DUAs with 10 state health departments, each of which is accessing NHSN data that are across various settings, and we welcome the opportunity to engage more states, localities, and territories in the DUA process.
- We expect that these changes will yield benefits for all parties to DUAs, and we will gladly discuss health department recommendations as we continue to develop our work-in-progress updates to the forms and processes.



# Health Department Access to NHSN Data

- NHSN data access will be extended to local and territorial health departments for surveillance and prevention purposes – as is currently done for state health departments – via data use agreements
- CDC will provide to state, local, or territorial health departments facility-level information to facilitate HAI prevention efforts
- During outbreak investigations, CDC will provide state, local, or territorial health departments with facility-level data to assist case-finding or outbreak control
  - This does not replace the requirement for facilities to adhere to local and state public health reporting requirements including reporting outbreaks to public health authorities as mandated.

*These new purposes of NHSN are part of the updated Consent, which should be accepted by all facilities by April 14, 2018.*

# What information can be shared with health departments for HAI prevention activities?

- NHSN data that identify facilities within a health department's jurisdiction that would benefit most from HAI prevention initiatives.
  - i.e., specific facilities to target for prevention activities
- CDC can provide these additional data to requesting health departments regardless of their existing access to NHSN data.
- These new provisions are designed to extend NHSN data access to new public health users and uses, which broadens NHSN's capacity and services, enables analysis and action at all geographic levels, and enhances the system's value for HAI prevention and response.

# What information can be made available to health departments during outbreaks?

- CDC can provide patient-level and facility-level data to assist in an outbreak response.
- Data from the Patient Safety Component that can be shared include:
  - Names of facilities within their jurisdiction with similar organisms or clusters (e.g., case finding)
  - Baseline rates for problem of interest within the jurisdiction
  - Standardized infection ratios (SIRs) for other HAIs at the outbreak facility (currently limited to *C. difficile*, CLABSI and CAUTI)
  - Requests for other data will be considered on a case by case basis

# What does a health department need to do to receive this information?

- 1) Contact [HAoutbreak@cdc.gov](mailto:HAoutbreak@cdc.gov) to communicate details of the situation/investigation and provide an outline of the information requested
- 2) Demonstrate that the information is being requested in support of an acute active public health response (i.e., outbreak)
- 3) Indicate how the data will provide actionable information that will assist in the response
- 4) Describe any relevant NHSN data access that is currently available via DUA, state or local reporting mandate, and/or voluntary NHSN group

## CDC Reminds Health Departments...

- Requests for NHSN data outside of the health department's jurisdiction will require consultation with CDC and the other health department(s) before data can be shared due to privacy requirements CDC must adhere
- Delays in reporting to NHSN (up to 6 months) limit the utility of NHSN for case finding
- CDC encourages health departments to use the NHSN data and tools that are already accessible to them via DUAs, state or local reporting mandates, and/or voluntary NHSN groups
  - CDC can provide consultation to assist with these analyses



# How to Engage with CDC Regarding DUAs?

- Review the DUA template
  - <https://www.cdc.gov/hai/state-resources/dua-announcement.html>
- Contact the Division of Healthcare Quality Promotion (DHQP)
  - [HAIAR@cdc.gov](mailto:HAIAR@cdc.gov)

The screenshot shows the CDC website page for "State-based HAI prevention". The page includes a search bar at the top right, a "CDC A-Z INDEX" dropdown, and a navigation menu on the left. The main content area is titled "State-based HAI prevention" and contains several resource boxes:

- State-based HAI prevention** (current page)
- Success Stories**
- CDC Resources for States** (dropdown menu)
  - State Health Departments: Access Data Reported to NHSN
  - DUA FAQ for Hospitals
  - Funding ELC
  - CDC POC
  - Grantee Meeting
  - State Policy Resources
- Get Email Updates** (form to receive a monthly update)
- CDC Resources for States** (social media icons)
- State Program Funding**
  - Epidemiology and Lab Capacity (ELC)
  - Emerging Infections Program (EIP)
- Communication Tools**
  - ASTHO/CDC HAI Communication Tools for Health Departments
  - ELC SharePoint Site
  - Medscape Commentary
  - Patient Safety
  - Clinician Outreach & Communications Activity
- Outbreak Resources**
  - Steps for Evaluating an Infection Control Breach
  - Outbreak Toolkit
  - How to Respond to New Forms of Antibiotic Resistance [PDF - 526 KB]
- Prevention Tools**
  - Toolkits & Slidesets
  - TAP
- Public Reporting Tools**
  - HAI Policy Toolkit
  - HAI Progress Report Summary
  - Patient Safety Atlas
- Contact CDC**
  - Points of Contact
- NHSN** (highlighted with a red circle)
  - NHSN Homepage
  - Data Use Agreement FAQ
  - Data Use Agreement Template

# Additional Information for Health Departments

- NHSN Consent information: <https://www.cdc.gov/nhsn/about-nhsn/technology.html>
- Consent Frequently Asked Questions: <https://www.cdc.gov/nhsn/about-nhsn/faq-agreement-to-participate.html>
- DUA Frequently Asked Questions: <https://www.cdc.gov/hai/state-resources/dua-faq.html>
- Email: [NHSNDUA@cdc.gov](mailto:NHSNDUA@cdc.gov)



# The Los Angeles County NHSN Group Experience

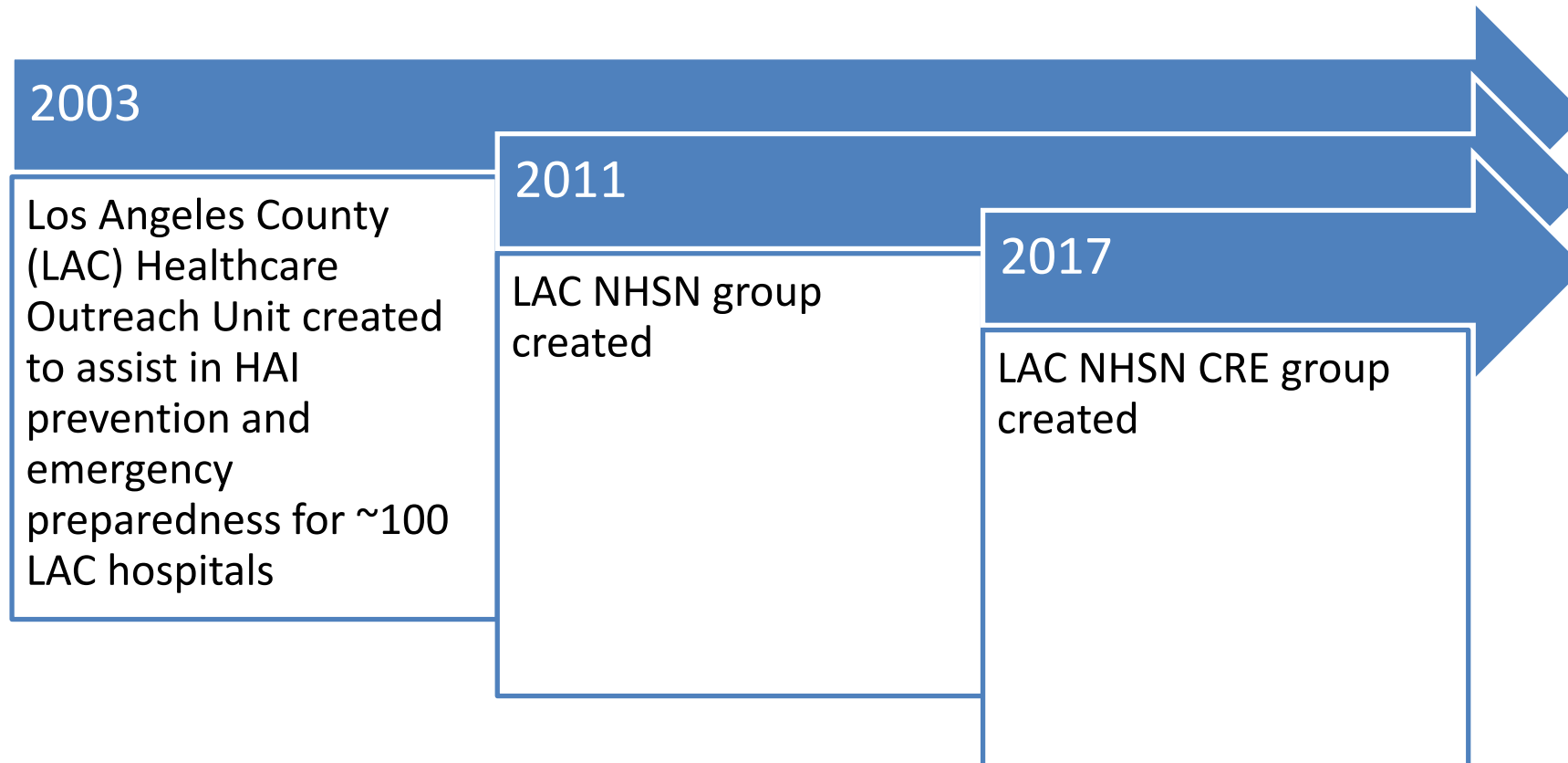
*Kelsey OYong  
HAI Coordinator*

*Sandeep Bhaurla  
Antimicrobial Resistance Epidemiologist*

*Los Angeles County Department of Public Health*



## LAC DPH Timeline



## General process for obtaining NHSN data in LA County

Mandate through state legislation or local order

External partner nominates group

Create group

Inform facilities via letter, communication

Follow up with late adopters





## California State mandate

- CA Senate Bill (SB) 739 (2006) required California Department of Public Health (CDPH) to develop a plan to obtain and analyze healthcare-associated infections (HAI) data
- CA SB 1058 (2008) required general acute care hospitals (ACHs) to report the following HAIs to CDPH via NHSN:
  - SSI
  - CLABSI
  - MRSA BSI
  - CDI
  - VRE



## Informing hospitals, part 1

- April 2010: sent letter to all ACHs requesting voluntary conferral of rights of the same data being submitted to CDPH
  - Included steps to enroll in LAC PH group
  - Sent to CEO, QA director, ICC chair, IP

The Los Angeles County (LAC) Department of Public Health Acute Communicable Disease Control Program is asking you to confer rights to the National Healthcare Safety Network (NHSN) group – LA County Public Health. Conferring rights to the LAC group will allow the LA County Public Health group administrator to view healthcare associated infection (HAI) data that was reported to the state and provide assistance with NHSN reporting issues if needed.

General acute care hospitals are mandated by California Senate Bills 739 and 1058 to report HAIs. Each hospital must enroll with the Centers for Disease Control and Prevention NHSN, join the California Department of Public Health (CDPH) NHSN group, and confer rights to CDPH.

Joining the LAC NHSN group is voluntary; however we would like to have all LAC acute care facilities participate in order to characterize hospital associated infections. Please note that conferring rights to this group will not permit other facilities within the group to view your data. Only the group administrator of the LA County Public Health group may see the member facilities' data.

## Informing hospitals, part 2

- September 2010: similar letter sent to hospital NHSN administrator
- Clarified the following:

Recent state legislation requires you to share hospital associated infection data with the California Department of Public Health (CDPH) via the National Healthcare Safety Network (NHSN). We at the Los Angeles County (LAC) Department of Public Health Acute Communicable Disease Control Program are requesting access to the same data via our NHSN group – called "LA County Public Health." Conferring rights to this group will allow the group administrator to view the data and provide assistance with NHSN reporting issues if needed. Giving LAC direct access to your NHSN data will allow us to assess local trends in a more timely manner, which can be essential to decrease the effects of disease.

Please note that joining and conferring rights to this group will not permit other facilities within the group to view your data. Only the group administrator may see the member facilities data. Data entered into NHSN will be aggregated when analyzed, and we will never publicly identify individual facilities. Furthermore, CDPH is solely responsible for public reporting of individual facility information.

At this time, joining our group is voluntary; however we would like to have all LAC acute care facilities participate in order that we may perform a complete analysis of hospital associated infection trends.



## Carbapenem-Resistant Enterobacteriaceae Surveillance

- CRE made reportable for all ACHs (including long-term acute care) and skilled nursing facilities in 2017

January 19, 2017

**TO:** All Acute Care Hospitals and Skilled Nursing Facilities in Los Angeles County

**FROM:** Jeffrey D. Gunzenhauser, M.D., M.P.H.  
Interim Health Officer

**RE:** **Health Officer Order for Reporting of Carbapenem-Resistant *Enterobacteriaceae* and Antimicrobial Resistance**

Antimicrobial resistance, including carbapenem-resistant *Enterobacteriaceae* (CRE), is a growing public health problem. In order to better understand the magnitude of the problem and identify areas for public health intervention, I am issuing this Health Officer Order mandating that all acute care hospitals and skilled nursing facilities report clinical laboratory CRE-positive tests isolated from any specimen source to the Los Angeles County Department of Public Health (LAC DPH). In addition, I am requiring acute care hospitals, and skilled nursing facilities that generate an antibiogram, to provide LAC DPH the most recent antibiogram each year.



## Why CRE via NHSN

- LabID Event reporting tracks positive laboratory results without clinical assessment
  - Much less labor-intensive method
- All hospitals are already enrolled in NHSN and reporting LabID events
  - More and more SNFs enrolling as well
- Reduced DPH data entry burden



## Helping Facilities Get Ready

- Provided instructions on how to:
  - Join new LA County NHSN CRE Group
  - Confer rights
  - Add CRE to their monthly reporting plan
  - Create custom fields
  - Enter CRE events into NHSN
- Also conducted 2 live webinars, with time for Q&A
  - Compiled questions into FAQs document

The following instructions relate to the Health Officer Order for Reporting of Carbapenem-Resistant Enterobacteriaceae (CRE) and Antimicrobial Resistance of Bacterial Pathogens, issued on January 19, 2017.

Updated information and instructions for CRE reporting can be found at:  
<http://publichealth.lacounty.gov/acd/Diseases/CRE.htm>

**Contents**

<b>1</b>	<b>Surveillance Definition</b>	<b>2</b>
1.1	Reporting Requirements	2
1.2	CRE Definition	2
<b>2</b>	<b>Submitting Data via the National Healthcare Safety Network – All NHSN Enrolled Facilities</b>	<b>3</b>
2.1	Joining the New LA County CRE NHSN Group	3
2.2	Conferring Rights	3
2.3	Adding CRE to Monthly Reporting Plan	4
2.4	Creating Custom Reporting Fields	5
2.5	Entering CRE Events into NHSN	7
2.6	Summary Data Entry	10
<b>3</b>	<b>Submitting Data to Morbidity Unit – Skilled Nursing Facilities Only</b>	<b>11</b>
3.1	Completing CRE Epi Form	11
3.2	Patient and Facility Information	11
3.3	Diagnostic Information	11
3.4	Healthcare Presentation	12



## CRE Website

- Link to website: <http://publichealth.lacounty.gov/acd/Diseases/CRE.htm>

CRE Frequently Asked Questions (FAQ) [English](#) [Spanish](#)

[Health Officer Order for Reporting Carbapenem-Resistant \*Enterobacteriaceae\* \(CRE\) and Antimicrobial Resistance \(1-19-17\)](#)

[Instructions for Complying with CRE Reporting Requirements](#)

[Frequently Asked Questions \(FAQ\) about Reporting CRE](#)

[CRE Case Report Form](#)

### **Reporting Instruction Webinars**

2017 LACDPH CRE and AR Health Officer Order Webinar

- [Webinar Slides](#)
- [Streaming Recording](#)
- [Download Recording](#)

**For questions, please email us at [hai@ph.lacounty.gov](mailto:hai@ph.lacounty.gov)**



## Considerations

- To collect all data we deemed necessary, we had to create custom fields
  - Order and label are important
- New group was created for CRE surveillance rather than add to existing group
  - Patient identifiers for CRE only
- Group must be nominated by external partner
  - Encourages buy-in from area hospitals
- Support from state health department is crucial
- Reaching out to hospital CEO/CMO was effective



## How we've used NHSN data

- 2011: conducted LAC Group validation
- 2012: provided quarterly HAI updates in ACDC internal reports
- 2016: disseminated 1<sup>st</sup> regional NHSN summary
- Outbreak response
- HAI cluster detection (NHSN data in SaTScan)
- Targeted interventions
  - CDI Collaborative recruitment
  - Healthcare personnel influenza vaccination improvement project
  - Antimicrobial resistance & stewardship assistance

# NHSN Snapshots

- Annual review of NHSN data with each hospital

Los Angeles County Department of Public Health  
NHSN Healthcare Associated Infections Snapshot

**Hospital A**  
Summary Year 2015

*This snapshot is preliminary data gathered from NHSN and Targeted Assessment for Prevention (TAP) reports that is limited and meant for internal use only. All SIRs apply to the above time period only.*

**CLABSI TAP Report**

Events (I, N, W)	Device Days (I, N, W)	DUR % (I, N, W)	CAD (I, N, W)	SIR (I, N, W)	LAC SIR
14 (4, 2, 8)	12026 (3159, 260, 8607)	25 (52, 18, 21)	5.7 (1.4, 1.7, 2.6)	0.9 (0.8, N/A, 0.8)	0.7

CLABSI Events by Unit

■ Med Surg ■ NICU ■ ICU ■

**CDI LabID TAP Report**

COHCFA Prevalence Rate	Healthcare Onset Events Count	Healthcare Onset Events Expected	CAD	SIR	LAC SIR
0.22	43	34.7	11.67	1.24	1.09

CDI LabID Events by Onset Type

■ CO ■ CO-HCFA ■ HO

HO and CO-HCFA CDI LabID Events by Unit

■ Quarter 1 ■ Quarter 2 ■ Quarter 3 ■ Quarter 4



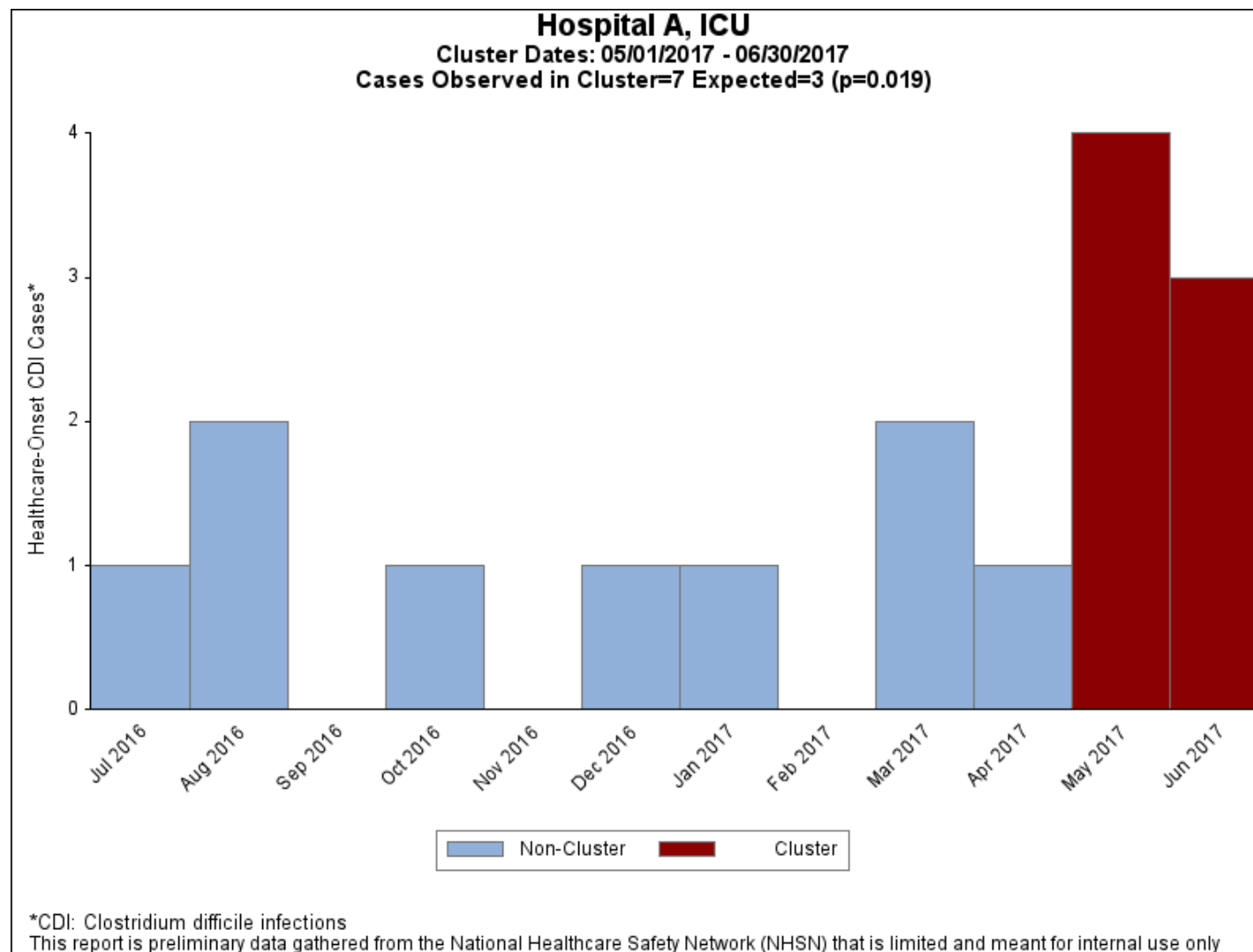


## CDI Collaborative recruitment

You are being invited to participate in this CDI collaborative because 2014 data, reported through the National Healthcare Safety Network (NHSN), indicates your hospital has not met the 2013 national HAI reduction goals for CDI. The table below indicates the cumulative attributable difference (CAD), which is the number of infections that must be prevented within your facility to achieve the national standardized infection ratio (SIR) goal.

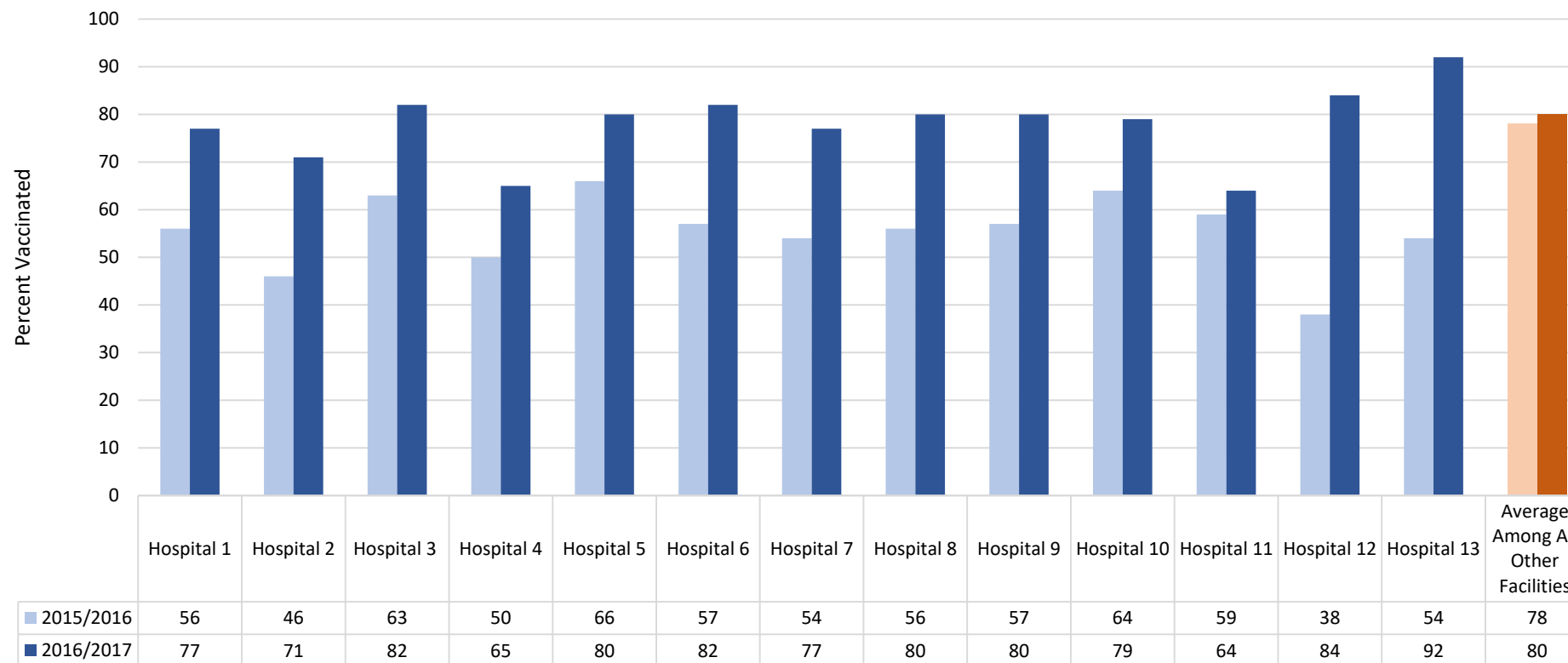


## Cluster detection using NHSN data



# Healthcare personnel influenza vaccination improvement project

Healthcare Personnel Influenza Vaccination Coverage by Hospital and Influenza Season





Contact us at:

**Kelsey OYong [koyong@ph.lacounty.gov](mailto:koyong@ph.lacounty.gov)**

**Sandeep Bhaurla, [sbhaurla@ph.lacounty.gov](mailto:sbhaurla@ph.lacounty.gov)**



# National Healthcare Safety Network (NHSN) Data Access and Use, City of Philadelphia

---



January 23, 2018  
Tiina Peritz, RN,BSN,MS  
Phillip Hahn, MPH,CPH

# Objectives

---

- Describe process for gaining access to NHSN data
- Describe current and future uses of NHSN data

# Gaining Access to NHSN Data

---

TIINA PERITZ



# Pursuing NHSN Access

---

- ELC funding for Hemodialysis Bloodstream Infection (BSI) Prevention Project
  - Request to voluntarily share NHSN data became a barrier for facility enrollment
- Initiated local legislative approach to gain access to NHSN data



Drafted "NHSN  
Reporting  
Amendment"  
Fall 2015

Approved by the  
Philadelphia  
Board of Health  
September 2016

Legislation in  
effect October  
2016

# Facility Enrollment - Option 1: Direct Outreach by PDPH

---

- Facilities need to join PDPH NHSN group in order to share data
  - Previously voluntary enrollment for hemodialysis facilities
- Targeting individual facilities reporting to NHSN
  - Facility identification
  - Points-of-contact in the facility
  - Communications
  - Follow up
- Possibly a long and labor-intensive process!!

# Facility Enrollment - Option 2: NHSN Super Group

---

- Local legislation requiring NHSN data sharing enabled CDC to share data directly with PDPH
  - Data use agreements with CDC limited to state health departments due to NHSN User Agreement language
- PDPH NHSN Super Group established in April 2017
  - All Philadelphia facilities added by CDC
  - Notifications to facilities by email and within NHSN
  - Facilities required to accept enrollment
  - Data immediately available

# Data Requested from Facilities

---

- Data to be requested needs to be specified by “defining templates” in NHSN
- Ideally completed prior to facility enrollment
- PDPH templates defined to include all data reported by Philadelphia facilities
  - All five NHSN components
  - All facility types
  - Unlimited time range
  - Unit level data
  - Patient identifiers
  - No identifiers for HCW data

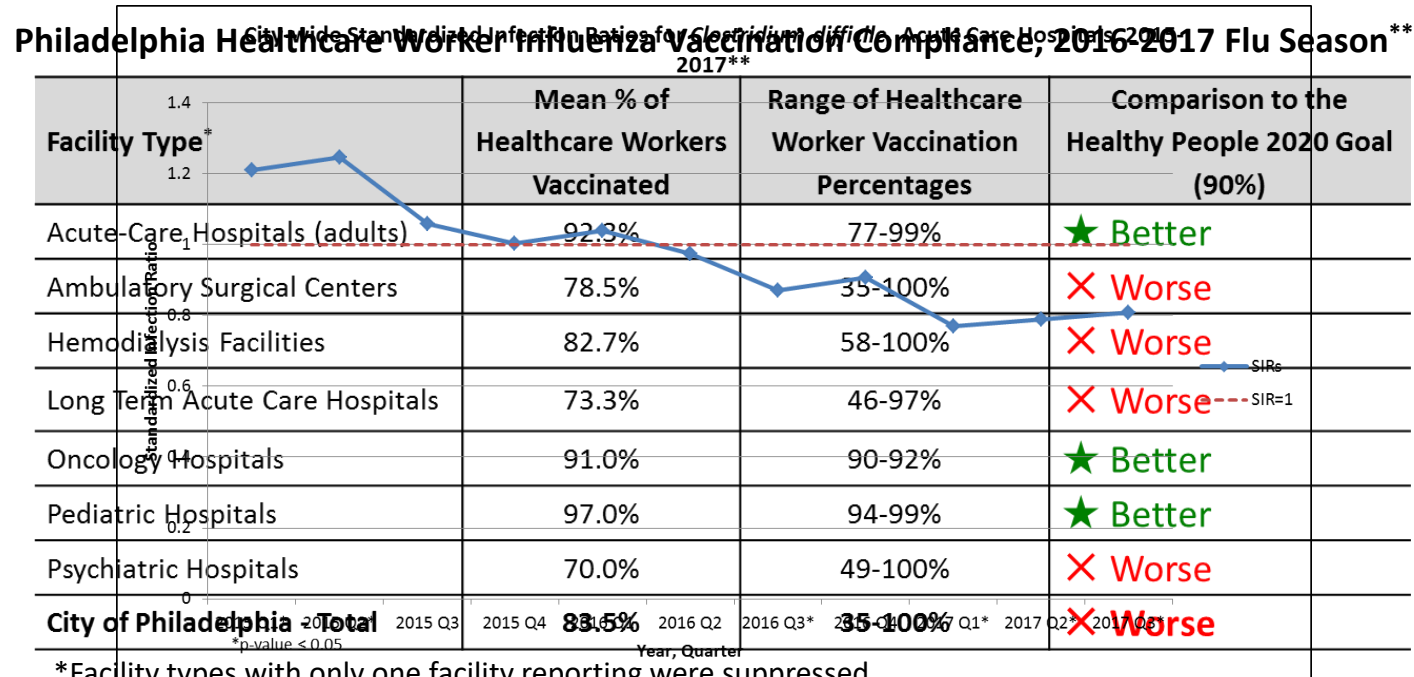
# Using NHSN Data

---

PHILLIP HAHN

# Data for Presentations, Projects, and Publications

- City-wide data that individual facilities have never seen
- Easy to match data visualization strategies to what facilities are used to



\*Facility types with only one facility reporting were suppressed

\*\*Based on observed # of infections / Expected # of infections

\*\* based on annual NHSN Patient Safety module

# Identifying Facilities with Highest Infection Rates

- Standardized Infection Ratio (SIR)
- CDC's Targeted Assessment for Prevention (TAP) Strategy
  - Running **TAP Reports** in NHSN that rank facilities (and units) based on the highest burden of excess infections

## National Healthcare Safety Network

TAP Report\_CAUTI\_Acute Care Hospitals (2015 Baseline)

Locations Ranked by CAD Within a Facility

SIR Goal : HHS Goal = 0.75

A TAP Report is the first step in the CDC TAP Strategy. For more information on the TAP strategy, please visit: <http://www.cdc.gov/hai/prevent/tap.html>

As of: November 9, 2017 at 3:58 PM

Date Range: BS2\_CAUI\_TAP summaryYM 2016M01 to 2017M10

Facility Rank	Facility Org ID	Facility Name	State	Type of Affiliation	Number of Beds	Location (LC)	Events (LC)	Device Days (LC)	DUR % (LC)	CAD (LC)	SIR (LC)	SIR Test	ICU No. Pathogens (EC,YS,PA,KS,PM,ES)	Ward+ No. Pathogens (EC,YS,PA,KS,PM,ES)
1	12382		PA	M	740	23 (6, 17)	114 (72, 42)	59040 (30914, 28126)	22 (63, 13)	42.8 (25.6, 17.1)	1.2 (1.2, 1.3)		73 (25, 0, 9, 1, 4, 7)	47 (19, 0, 8, 1, 5, 4)
2	10219		PA	M	730	26 (5, 21)	102 (71, 31)	62751 (34869, 27882)	16 (55, 9)	30.3 (24.9, 5.4)	1.1 (1.2, 0.9)		76 (21, 0, 9, 16, 4, 7)	31 (11, 0, 4, 9, 1, 5)
3	11506		PA	M	769	44 (11, 33)	118 (68, 50)	68038 (31047, 36991)	22 (60, 14)	29.5 (17, 12.5)	1 (1, 1)		69 (30, 0, 10, 7, 2, 10)	51 (15, 0, 12, 2, 4, 4)



# Target Facilities with Highest Infection Rates for Follow Up

---

- Infection Control Assessment and Response (ICAR) Assessments
- TAP Assessments
- In-services for healthcare facilities
- PDPH resource prioritization

# Supplement Other Data Sources

---

- Combining NHSN data with other surveillance or programmatic data can answer questions that otherwise could not be answered
- Simple process to extract line lists and frequency tables to make datasets
- Example
  - *Impact of an Infection Control Assessment and Response Visit on Dialysis Event Rates*
    - NHSN → monthly dialysis event counts; patient-months
    - PDPH → ICAR data (date, company of facility, reason for assessment, etc.)

# Future Plans for NHSN

---

- Healthcare-associated Infections & Antimicrobial Resistance newsletter to disseminate to regional healthcare providers and public health officials
- Guiding HAI/AR Collaborative Advisory Group priorities, topics, and projects
- Facility-specific updates based on various metrics devised from NHSN data

# Thank you!

---

- Questions??

**Tiina Peritz**, [Tiina.Peritz@phila.gov](mailto:Tiina.Peritz@phila.gov)

**Phillip Hahn**, [Phillip.Hahn@phila.gov](mailto:Phillip.Hahn@phila.gov)



# Thank you!

To ask the presenters a question,  
please type it into the Q&A box.

You will receive an evaluation following this webinar to  
help shape and improve future content.

For other information, feedback, or questions visit  
[www.naccho.org](http://www.naccho.org) or email [infectiousdiseases@naccho.org](mailto:infectiousdiseases@naccho.org)

**NACCHO**  
National Association of County & City Health Officials