



# ***Clostridium difficile* Reduction through the Targeted Assessment for Prevention Strategy**

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# Disclosures

▶ I have no conflicts of interest to disclose

# Objectives

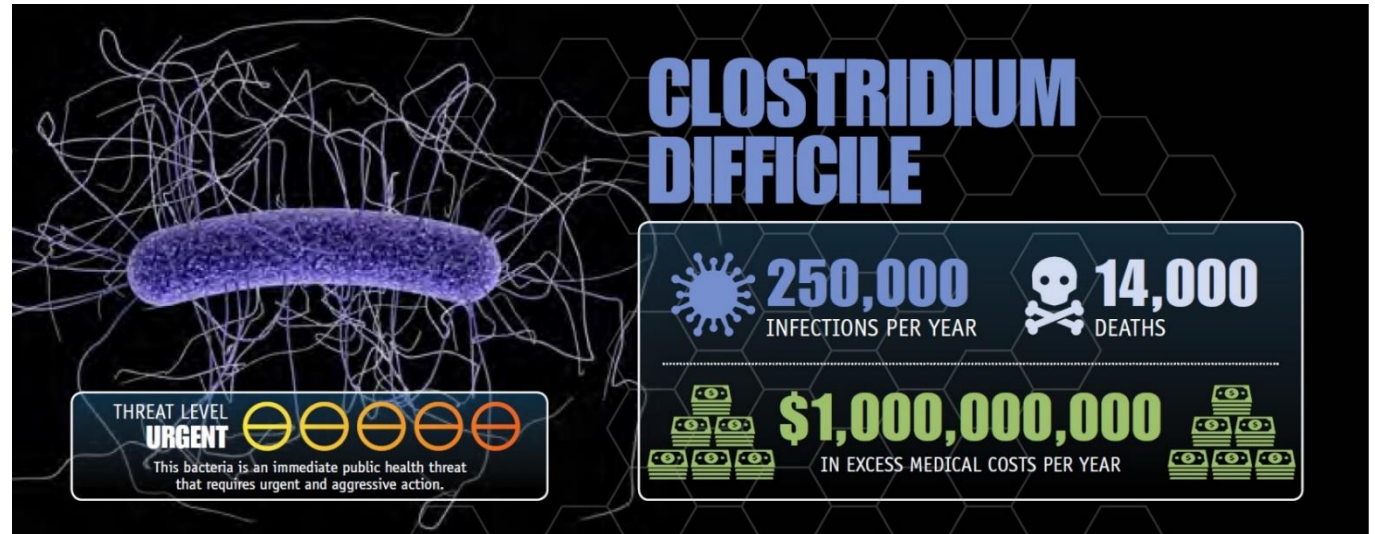
- ▶ Describe the Targeted Assessment for Prevention (TAP) Strategy
- ▶ Discuss the ways in which the TAP Strategy can identify infection prevention gaps and reduce *Clostridium difficile* infections (CDI)



# *Clostridium difficile* (C. diff)

CDC's 2013 AR Threats Report

- ▶ Recent taxonomy change – now *Clostridioides difficile*
- ▶ Bacteria that causes diarrhea, fever, abdominal pain, nausea and loss of appetite
- ▶ Often associated with antibiotic use
- ▶ 1 in 5 patients suffer recurrent infections

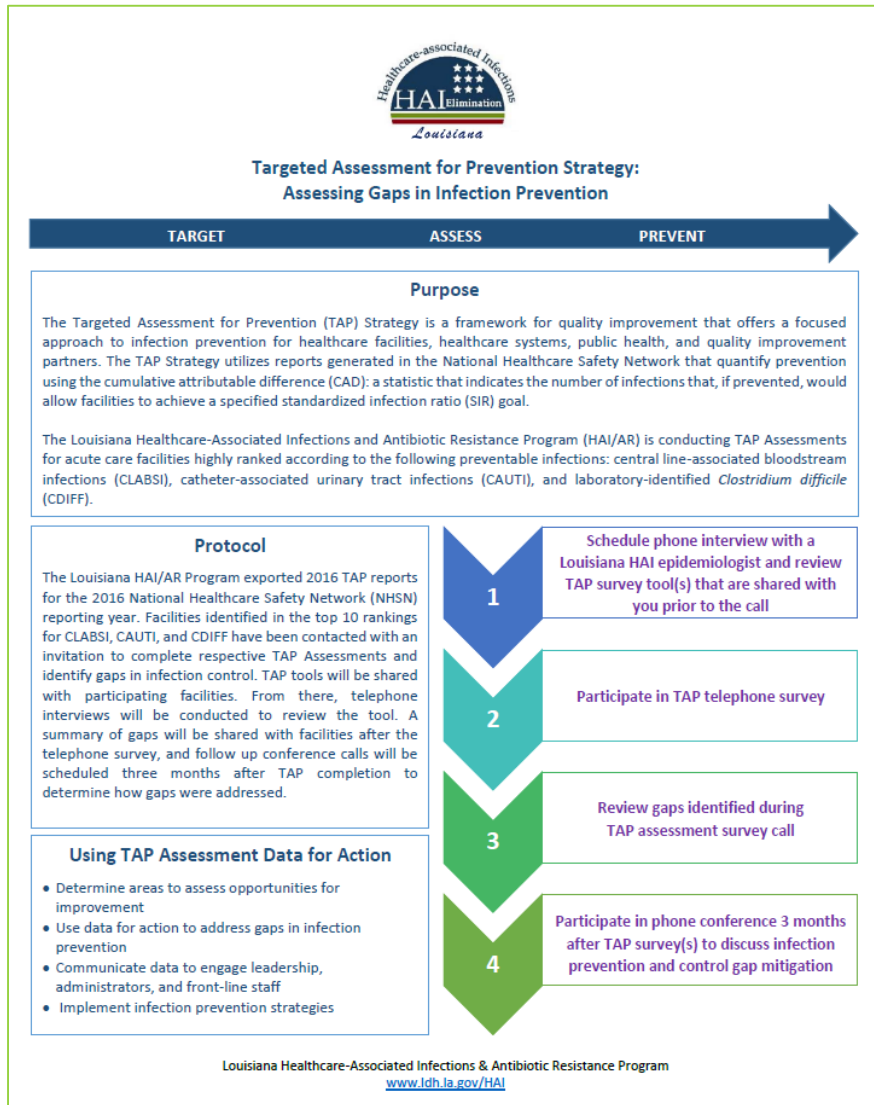


As of 2015  
500,000 infections per year  
15,000 deaths per year

## Issues with *C. diff*

- ▶ Inappropriate testing
- ▶ Colonization is common
- ▶ Spore forming
- ▶ Isolation and Contact Precautions required
- ▶ Most commonly affects elderly, immunocompromised, and medically-complex patients

# Overview of the Targeted Assessment for Prevention (TAP) Strategy



► CDC framework for quality improvement

■ CLABSI

■ CAUTI

■ CDI

► Offers a way of identifying issues at the bedside

► Provides tools to drive down infections

# About the TAP Strategy



## ► Three components

1. Target – identify and recruit facilities with the highest number of preventable infections
2. Assess – administer TAP Assessment Tool to participating facilities to identify gaps
3. Prevent – address the identified gaps to prevent infections

## ► Completed over the course of 6 months

## ► Involves identification of CDI champions and unit-led interventions

## ► Follow-up reports generated at 3, 6, and 9 months post TAP Strategy to ensure sustained reductions

# Target

- ▶ Generate TAP Reports in the National Healthcare Safety Network (NHSN)
- ▶ All ACHs in the state are ranked according to the Cumulative Attributable Difference (CAD)
- ▶ Being #1 is bad



facRank	orgID	name	numpatdays	COHCFA_prevRate	CDIF_facIncHOCCount	numPred	facCAD	SIR	SIRtest
1				0.14	525	501.47	174.0	1.047	
2				0.11	204	131.62	111.9	1.550	SIG
3				0.10	208	185.21	78.35	1.123	
4				0.07	217	226.34	58.56	0.959	
5				0.17	75	45.486	43.16	1.649	SIG
6				0.22	116	113.10	36.83	1.026	
7				0.07	124	129.16	33.59	0.960	
8				0.08	90	83.840	31.31	1.073	
9				0.14	67	51.908	30.66	1.291	SIG
10				0.18	73	68.359	25.15	1.068	



# Standardized Infections Ratio (SIR) vs. Cumulative Attributable Difference (CAD)

SIR

Benchmarking

► Compares the actual number of HAIs reported with the baseline U.S. experience, adjusting for several risk factors that have been found to be significantly associated with differences in infection incidence.

- $SIR < 1.0$  = Fewer HAIs were observed than predicted
- $SIR > 1.0$  = More HAIs were observed than predicted

CAD

Quantifying Prevention

► This is the number of infections that must be prevented to achieve a HAI reduction goal.

- $CAD < 0$  = Fewer observed infections than predicted – no excess burden of infections
- $CAD > 0$  = Excess burden of infections, that if prevented, would allow you to achieve an SIR goal

# Pulling back the curtain on the CAD...



- ▶ Cumulative Attributable Difference: The number of infections that must be prevented within a group, facility, or unit to achieve an HAI reduction goal.
  - Stated another way, the number of excess infections compared to what was predicted

$$\text{CAD} = (\text{Observed HAIs}) - (\text{Predicted HAIs} * \text{SIRgoal})$$

NHSN does  
this for you!  
No need to do  
it by hand.

## NHSN - National Healthcare Safety Network

### NHSN Home

- Reporting Plan ▶
- Event ▶
- Procedure ▶
- Summary Data ▶
- Surveys ▶
- Analysis ▶**
- Users ▶
- Group ▶
- Logout



### NHSN Patient Safety Component Home Page

**Assurance of Confidentiality:** The voluntarily provided information obtained in this surveill. without the consent of the individual, or the institution in accordance with Sections 304, 306

[Generate Data Sets](#)

**Reports**

[Statistics Calculator](#)

[Preferences](#)

[Get Adobe Acrobat Reader for PDF files](#)



## Analysis Reports

Expand All

Collapse All

Search

- Device-Associated (DA) Module
- Procedure-Associated (PA) Module
- HAI Antimicrobial Resistance (DA+PA Modules)
- Antimicrobial Use and Resistance Module
- MDRO/CDI Module - LABID Event Reporting
- MDRO/CDI Module - Infection Surveillance
- MDRO/CDI Module - Process Measures
- MDRO/CDI Module - Outcome Measures
- CMS Reports
- TAP Reports
  - Acute Care Hospitals (ACHs)
    - TAP TAP Report - ACH and CAH CLAB Data
    - TAP TAP Report - ACH and CAH CAU Data
    - TAP TAP Report - ACH and CAH FACWIDEIN MRSA LabID Data
    - TAP TAP Report - ACH and CAH FACWIDEIN CDI LabID Data**
  - Long Term Acute Care Hospitals (LTACs)
    - TAP TAP Report - LTAC CLAB Data
    - TAP TAP Report - LTAC CAU Data
    - TAP TAP Report - LTAC FACWIDEIN CDI LabID data
  - Inpatient Rehabilitation Facilities (IRFs)
    - TAP TAP Report - IRF CAU Data
    - TAP TAP Report - IRF CDI LabID Data



# Quiz

► Which facility has the greatest number of excess infections that would need to be prevented to reach a specific CDI reduction goal?

■ A

■ B

■ C

	Facility Name	CDI HO Events	Number Predicted Events	CAD	SIR
A	Pawnee Memorial	217	226.34	58.56	0.959
B	Twin Peaks General Hospital	204	131.62	111.9	1.550
C	Wayward Pines Regional Medical Center	75	45.486	43.16	1.649

# Quiz

► Which two facilities had more C. diff infections than predicted?

■ A & B

■ B & C

■ A & C

	Facility Name	CDI HO Events	Number Predicted Events	CAD	SIR
A	Pawnee Memorial			58.56	0.959
B	Twin Peaks General Hospital			111.9	1.550
C	Wayward Pines Regional Medical Center			43.16	1.649

# Assess

**Clostridium difficile Infection (CDI)**  
**Targeted Assessment for Prevention (TAP) Facility Assessment Tool**

Notes for the Respondent:

- This assessment is meant to capture your awareness and perceptions of policies and practices related to CDI prevention at the facility or unit in which this assessment is being administered.
- Responses should refer to what is currently in place at the facility or unit in which the assessment is being administered.
- Please use the comment boxes to elaborate and capture information as needed – such detailed comments may help focus additional drill down opportunities and next steps.

Instructions for Submission:

Do you have a <b>Desktop Email Application?</b> (e.g., Outlook, Windows Live Mail)	Do you have a <b>web-based email address?</b> (e.g., Gmail, Yahoo)	Are you having <b>trouble submitting?</b> (e.g., No email application, Firewall is blocking submission)
1) Click SUBMIT 2) Select the top radio button (Desktop Email Application) 3) Click OK <i>This will automatically generate an email with the completed form attached</i>	1) Click SUBMIT 2) Select the bottom button (Internet Email) 3) Copy the email address listed in the text next to the radio button 4) Click OK 5) Save the document to your computer 6) Open your web based email, attach the file, and send to the copied email address	1) Click the PRINT button 2) Print to a local printer 3) Give completed form to your facility Point of Contact

**For Internal Use Only**

**Instructions for Administration:**  
This Facility Assessment Tool should be administered to a variety of staff and healthcare personnel at different levels of the organization and/or unit (i.e., frontline providers, mid-level staff, and senior leadership). This tool also should be administered to Environmental Services personnel as they too play a critical role in CDI prevention. This assessment captures healthcare personnel's knowledge, attitudes, and perceptions of infection prevention practices. The greater number of assessments collected, the greater the ability to identify gaps and target prevention.

This Assessment Tool is a component of the Targeted Assessment for Prevention (TAP) Strategy. For more information, visit <http://www.cdc.gov/hai/prevent/tap.html>

This tool can be distributed and returned via email. Prior to distribution, enter the email address to which the completed assessments should be returned and Save the document (send this Saved version to respondents). When respondents "Submit", the form will be automatically sent to the email address specified below.

Return Email Address:

## ► Administer TAP Facility Assessment Tool to identify gaps in infection prevention

- Captures awareness and perceptions of policies and practices related to infection prevention
- Responses should refer to what is currently in place

## ► 5 domains

- General infrastructure, capacity, and processes
- Antibiotic stewardship for CDI prevention
- Early detection and isolation, appropriate testing
- Contact precautions and hand hygiene
- Environmental cleaning



# Prevent



- ▶ Access infection prevention resources within the TAP Implementation Guides to address gaps
- ▶ Prevention strategies and interventions are coordinated by the facility
- ▶ The HAI Program conducts monthly check-in calls and provides guidance



# Follow Up

- ▶ Once each phase of the TAP Strategy is completed, the HAI/AR Program will follow up 3 months, 6 months, and 9 months from the conclusion of the project to survey the facility's infection prevention staff on program implementation and gap mitigation
- ▶ Infection Prevention leads will receive summarized findings at each step of the TAP Strategy





# CDI TAP Implementation Guide

<https://www.cdc.gov/hai/prevent/tap/cdiff.html>

Healthcare-associated Infections (HAI)	
HAI Data	+
Types of Infections	+
Diseases and Organisms	+
Preventing HAIs	-
CDI Prevention Strategies	
Urine Culture Stewardship	+
Targeted Assessment for Prevention (TAP)	-
TAP CAUTI Implementation Guide	
<b>TAP CDI Implementation Guide</b>	
TAP CLABSI Implementation Guide	
Infection Prevention Champions	
Toolkits	+
Basic Infection Control and Prevention Plan for Outpatient Oncology Settings	+
Outpatient Care Guide	

[CDC](#) > [Healthcare-associated Infections \(HAI\)](#) > [Preventing HAIs](#) > [Targeted Assessment for Prevention \(TAP\)](#)

## TAP Clostridium difficile infection (CDI) Implementation Guide: Links to Example Resources



**Disclaimer:** The links in the domains below are not mutually exclusive nor do they represent an exhaustive list of all the possible resources available. Furthermore, the links presented do not constitute an endorsement of these organizations or their programs by the Centers for Disease Control and Prevention (CDC) or the federal government, and none should be inferred.

Also refer to the following guidelines:

[Strategies to Prevent \*Clostridium difficile\* Infections in Acute Care Hospitals: 2014 Update](#) ↗

[Clinical Practice Guidelines for \*Clostridium difficile\* Infection in Adults: 2010 Update by the Society for Healthcare Epidemiology of America \(SHEA\) and the Infectious Diseases Society of America \(IDSA\)](#)  [PDF – 25 pages]

Other relevant [CDC guidelines](#).

[CDI Prevention Primer Slide Set](#)  [PPT – 7.3 MB]

- > **I. General Infrastructure, Capacity, and Processes**
- > **II. Antibiotic Stewardship**
- > **III. Early Detection and Isolation, Appropriate Testing**
- > **IV. Contact Precautions/Hand Hygiene**
- > **V. Environmental Cleaning**
- > **VI. Laboratory Practices**

# Scenario

► Ann Perkins, the Infection Preventionist at Pawnee General Hospital, notices that her facility's CAD is 112, indicating that they have an excess burden of *C. diff* infections. She reaches out to the HAI Program and agrees to participate in the TAP Strategy

◆ The TAP Assessment revealed the following infection prevention gaps

<u>Domain 1:</u> General Infrastructure, Capacity, and Processes	<u>Domain 2:</u> Antibiotic Stewardship for CDI Prevention	<u>Domain 3:</u> Early Detection and Isolation, Appropriate Testing	<u>Domain 4:</u> Contact Precautions/Hand Hygiene	<u>Domain 5:</u> Environmental Cleaning
No physician champion  No annual competency for PPE usage	No strategies in place for reducing use of high-risk antibiotics (e.g. fluoroquinolones and 3 <sup>rd</sup> /4 <sup>th</sup> gen. cephalosporins)	Some providers test for cure  CDI status is not communicated by transferring facilities	Contact precautions signs do not provide directions for hand hygiene and PPE usage  Staff do not always wear gowns and gloves when caring for CDI patients	It's not clear which items are cleaned by EVS and which should be cleaned by clinical staff  The amount of time allotted for terminal cleaning is insufficient

# Gap Mitigation

- ▶ The HAI Program hosts a conference call to review the identified gaps and provides free educational modules for staff
- ▶ After staff complete the educational modules, Ann assembles a multi-disciplinary team headed by a nurse and physician CDI champion
- ▶ The team analyzes the facility's specific gaps and uses the TAP CDI Implementation Guide to develop strategies and interventions to correct them



# Example Resources

► No strategies in place for reducing use of high-risk antibiotics

## ▼ II. Antibiotic Stewardship

- [Checklist for Core Elements of Hospital Antibiotic Stewardship Programs](#)  [PDF - 24 pages]

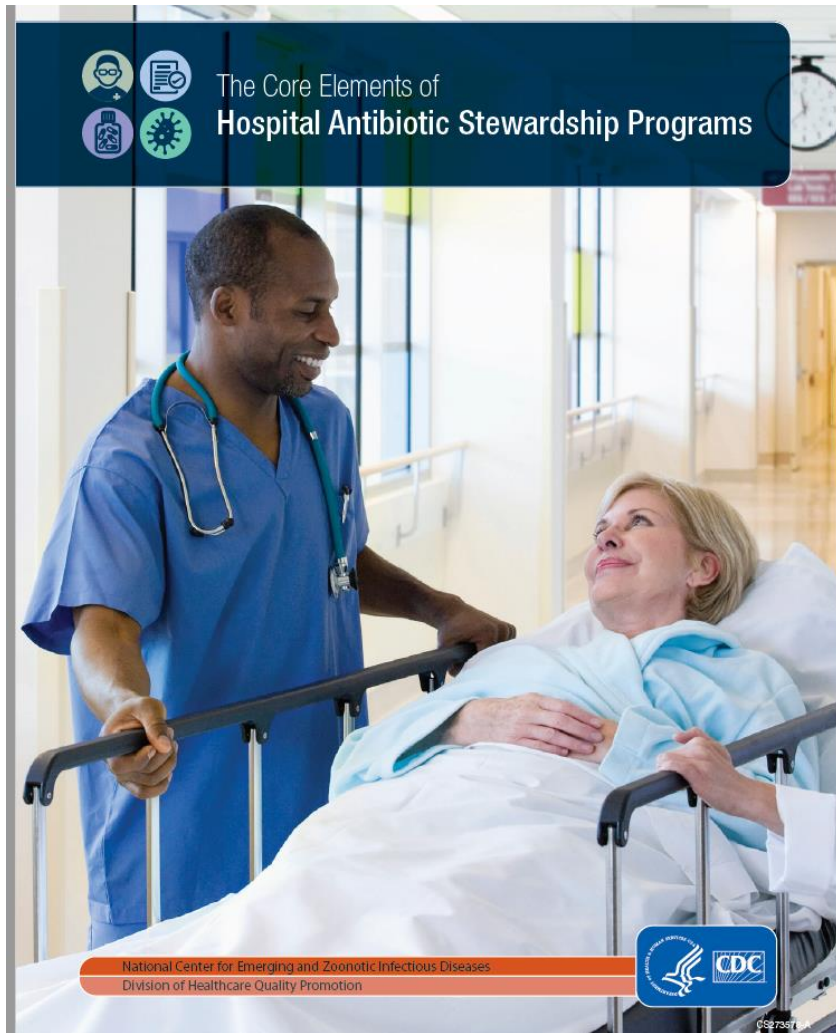
Checklist to be used as a baseline assessment of policies and practices and as a guide for stewardship activities in acute and long term acute care, from CDC

- [Checklist of Core Elements in Antibiotic Stewardship for Long Term Care](#)  [PDF - 85 KB]

Checklist to be used as a baseline assessment of policies and practices and as a guide for expanding stewardship activities in nursing homes, from CDC

- [Checklist of Core Elements in Antibiotic Stewardship for Outpatient Clinics](#)  [PDF - 2 pages]

Checklist to be used as a baseline assessment of policies and practices and as a guide for expanding stewardship activities in outpatient care facilities, from CDC



## Broad interventions

- **Antibiotic “Time outs.”** Antibiotics are often started empirically in hospitalized patients while diagnostic information is being obtained. However, providers often do not revisit the selection of the antibiotic after more clinical and laboratory data (including culture results) become available.<sup>53-56</sup> An antibiotic “time out” prompts a reassessment of the continuing need and choice of antibiotics when the clinical picture is clearer and more diagnostic information is available. All clinicians should perform a review of antibiotics 48 hours after antibiotics are initiated to answer these key questions:
  - Does this patient have an infection that will respond to antibiotics?
  - If so, is the patient on the right antibiotic(s), dose, and route of administration?
  - Can a more targeted antibiotic be used to treat the infection (de-escalate)?
  - How long should the patient receive the antibiotic(s)?
- **Prior authorization.** Some facilities restrict the use of certain antibiotics based on the spectrum of activity, cost, or associated toxicities<sup>57</sup> to ensure that use is reviewed with an antibiotic expert before therapy is initiated. This intervention requires the availability of expertise in antibiotic use and infectious diseases and authorization needs to be completed in a timely manner.
- **Prospective audit and feedback.** External reviews of antibiotic therapy by an expert in antibiotic use have been highly effective in optimizing antibiotics in critically ill patients and in cases where broad spectrum or multiple antibiotics are being used.<sup>25, 58, 59</sup> Prospective audit and feedback is different from an antibiotic “time out” because the audits are conducted by staff other than the treating team. Audit and feedback requires the availability of expertise and some smaller facilities have shown success by engaging external experts to advise on case reviews.<sup>33</sup>

## Pharmacy-driven Interventions

- **Automatic changes from intravenous to oral antibiotic therapy** in appropriate situations and for antibiotics with good absorption (e.g., fluoroquinolones, trimethoprim-sulfamethoxazole, linezolid, etc.),<sup>60, 61</sup> which improves patient safety by reducing the need for intravenous access.
- **Dose adjustments** in cases of organ dysfunction (e.g. renal adjustment).
- **Dose optimization** including dose adjustments based on therapeutic drug monitoring, optimizing therapy for highly drug-resistant bacteria, achieving central nervous system penetration, extended-infusion administration of beta-lactams, etc.<sup>62, 63</sup>
- **Automatic alerts in situations where therapy might be unnecessarily duplicative** including simultaneous use of multiple agents with overlapping spectra e.g. anaerobic activity, atypical activity, Gram-negative activity and resistant Gram-positive activity.<sup>64</sup>
- **Time-sensitive automatic stop orders** for specified antibiotic prescriptions, especially antibiotics administered for surgical prophylaxis.<sup>65</sup>
- **Detection and prevention of antibiotic-related drug-drug interactions** e.g. interactions between some orally administered fluoroquinolones and certain vitamins.

# Example Resources

▶ No strategies in place for reducing use of high-risk antibiotics

▶ No annual competency for PPE usage

## **Personal Protective Equipment Training and Competency Assessment**

- [CDC Personal Protective Equipment Use Poster](#)  [PDF – 45 pages]

Poster displaying and describing proper method and sequence for donning and removing personal protective equipment (PPE), from CDC

- [Contact Isolation Skills Competency Checklist](#)  [PDF – 2 pages] 

Competency assessment checklist for donning and doffing PPE and contact isolation precautions, from the American Association of Nurse Assessment Coordination



# Example Resources

► No strategies in place for reducing use of high-risk antibiotics

► No annual competency for PPE usage

► It's not clear which items are cleaned by EVS and which should be cleaned by clinical staff

## ▼ V. Environmental Cleaning

- [EPA Registered Antimicrobial Products Effective against \*Clostridium difficile\* Spores](#) 

Listing of disinfectant products with sporicidal activity against *C. difficile*, from the Environmental Protection Agency (EPA)

- [Not Just A Maid Service](#)

Video describing how two hospitals engaged their environmental service workers to decrease transmission of CDI, from the Illinois Department of Public Health

- [Algorithms for Prevention and Management of \*Clostridium difficile\* Infections in Long-term Care Facilities](#)  [PDF – 11 pages] 

Instructions for environmental cleaning and disinfection for patients with CDI (pg. 9), from the Minnesota Department of Public Health

- [Clostridium difficile Infection \(CDI\) Toolkit – A Healthcare Professional's Guide to Preventing CDIs](#) 

Compilation of guidelines, recommendations, and tools for reducing CDI, including strategies for environmental cleaning (pgs. 22-23) and a CDC Environmental Checklist for terminal cleaning (pg. 27), from the Centers for Medicare & Medicaid Services (CMS) Quality Improvement Organizations (QIOs) and Atom Alliance

- [Equipment Cleaning Guidelines Template](#)  [PDF – 6 pages] 

Example of how to delineate roles for cleaning equipment. The template includes what to clean, when to clean, who cleans, and type of cleaner. Developed by the Rochester Patient Safety Collaborative.

- [C. Difficile Collaborative Non-ICU Environmental Cleaning Checklist](#)  [PDF – 1 page] 

Example list of items to be cleaned by environmental staff. Resource can be used as an audit for observation of room cleaning procedures. Developed by the Rochester Patient Safety Collaborative.

# Example Resources






► No strategies in place for reducing use of high-risk antibiotics

► No annual competency for PPE usage

► It's not clear which items are cleaned by EVS and which should be cleaned by clinical staff

► CDI status is not communicated by transferring facilities

## ▼ III. Early Detection and Isolation, Appropriate Testing

- [Algorithms for Prevention and Management of \*Clostridium difficile\* Infections in Long-term Care Facilities](#)  [PDF – 11 pages] [↗](#)  
Decision-making strategies for enhancing early recognition, testing, and isolation of patients with CDI in long-term care facilities, from the Minnesota Department of Public Health
- [C. difficile Infection Change Package: Preventing C. difficile Transmission and Infection](#)  [PDF – 25 pages] [↗](#)  
Compilation of tools, including algorithms for testing and diarrhea decision trees that align with appropriate isolation and testing guidelines (pgs. 23, 24), from the Health Research & Educational Trust (HRET), American Hospital Association (AHA), and Partnership for Patients
- [Bristol Stool Form Scale](#) [↗](#)  
Scale tool that provides an objective way to differentiate between various types of stool forms and recognize diarrhea, from the National Institutes of Health (NIH)
- [Guidance to Providers: Testing for C. difficile Infection](#)  [PDF – 3 pages] [↗](#)  
Recommendations for CDI testing, including a sample diagnostic algorithm (pg. 2), from Vanderbilt University Medical Center
- [Inter-facility Infection Control Transfer Form](#)  [PDF – 2pages]  
Sample form to assist in fostering communication of infectious disease status during transitions of care, from CDC and the Utah Department of Health
- [Inter-facility Infection Prevention Transfer Form](#)  [PDF – 1 page] [↗](#)  
Sample form for communication of infectious disease status, including CDI, during transitions of care, from the Cook County (IL) Department of Public Health



# Inter-facility Infection Control Transfer Form

This form must be filled out for transfer to accepting facility with information communicated prior to or with transfer.

Please attach copies of latest culture reports with susceptibilities if available.

## Sending Healthcare Facility:

Patient/Resident Last Name	First Name	Date of Birth	Medical Record Number
		/ /	
Name/Address of Sending Facility		Sending Unit	Sending Facility Phone
Sending Facility Contacts	Contact Name	Phone	E-mail
Transferring RN/Unit			
Transferring physician			
Case Manager/Admin/SW			
Infection Preventionist			
Does the person* currently have an infection, colonization OR a history of positive culture of a multidrug-resistant organism (MDRO) or other potentially transmissible infectious organism?		Colonization or history Check if YES	Active infection on Treatment Check if YES
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)			
Vancomycin-resistant <i>Enterococcus</i> (VRE)			
<i>Clostridioides difficile</i>			
<i>Acinetobacter</i> , multidrug-resistant			
Enterobacteriaceae (e.g., <i>E. coli</i> , <i>Klebsiella</i> , <i>Proteus</i> ) producing-Extended Spectrum Beta-Lactamase (ESBL)			
Carbapenem-resistant Enterobacteriaceae (CRE)			
Other, specify (e.g., lice, scabies, norovirus, influenza):			

Does the person\* currently have any of the following? (Check here ☐ if none apply)

- |  |  |
|--|--|
| <input type="checkbox"/> Cough or requires suctioning                    | <input type="checkbox"/> Central line/PICC (Approx. date inserted ___/___/___) |
| <input type="checkbox"/> Diarrhea  | <input type="checkbox"/> Hemodialysis catheter                                 |
| <input type="checkbox"/> Vomiting  | <input type="checkbox"/> Urinary catheter (Approx. date inserted ___/___/___)  |
| <input type="checkbox"/> Incontinent of urine or stool                   | <input type="checkbox"/> Suprapubic catheter                                   |
| <input type="checkbox"/> Open wounds or wounds requiring dressing change | <input type="checkbox"/> Percutaneous gastrostomy tube                         |
| <input type="checkbox"/> Drainage (source) _____                         | <input type="checkbox"/> Tracheostomy  |

Is the person\* currently in Transmission-Based Precautions? ☐ NO ☐ YES

Type of Precautions (check all that apply) ☐ Contact ☐ Droplet ☐ Airborne ☐ Other: \_\_\_\_\_

Reason for Precautions: \_\_\_\_\_

Is the person\* currently on antibiotics? ☐ NO ☐ YES (current use)

Antibiotic, dose, route, freq.	Treatment for:	Start date	Anticipated stop date	Date/time last dose
Vaccine	Date administered (if known)	Lot and Brand (if known)	Year administered (if exact date not known)	Does the person* self-report receiving vaccine?
Influenza (seasonal)				<input type="checkbox"/> Yes <input type="checkbox"/> No
Pneumococcal (PPSV23)				<input type="checkbox"/> Yes <input type="checkbox"/> No
Pneumococcal (PCV13)				<input type="checkbox"/> Yes <input type="checkbox"/> No
Other:				<input type="checkbox"/> Yes <input type="checkbox"/> No
Name of staff completing form (print)	Signature	Date	If information communicated prior to transfer: Name and phone of individual at receiving facility	

\*Refers to patient or resident depending on transferring facility

# Inter-facility Infection Prevention Transfer Form

When transferring patient/resident, please complete to the best of your ability to assist with care transitions.

## Patient Information

Last Name \_\_\_\_\_ First Name \_\_\_\_\_  
Date of Birth \_\_\_/\_\_\_/\_\_\_

## Isolation Precautions

The patient currently requires the following type(s) of isolation precautions.

- ☐ Contact precautions. Reason: \_\_\_\_\_
- ☐ Droplet precautions. Reason: \_\_\_\_\_
- ☐ Airborne precautions. Reason: \_\_\_\_\_
- ☐ The patient DOES NOT require isolation.

## Infection/Colonization History (check all that apply)

- ☐ MRSA (Methicillin-resistant *Staphylococcus aureus*)
- ☐ VRE (Vancomycin-resistant enterococci)
- ☐ *Clostridium difficile*
- ☐ Any MDRO gram-negative bacteria (multidrug-resistant). If known, please also specify:
- ☐ Carbapenem-resistant *Enterobacteriaceae* (examples: *Klebsiella* or *E. coli* with KPC, NDM-1)
  - ☐ *Acinetobacter*, multidrug-resistant
  - ☐ ESBL (extended spectrum beta-lactamase) bacteria
  - ☐ *Pseudomonas aeruginosa*, multidrug-resistant
- ☐ Respiratory Illness (influenza, adenovirus, etc., suspected or confirmed) — Droplet Precautions
- ☐ Respiratory Illness (tuberculosis, etc., suspected or confirmed) — Airborne Precautions
- ☐ Any other pathogen requiring isolation. Please list: \_\_\_\_\_

## Sending Facility Information

Facility Name \_\_\_\_\_ Unit \_\_\_\_\_  
Address \_\_\_\_\_ Phone \_\_\_\_\_

## Person Completing Form

Name/Title \_\_\_\_\_  
Phone \_\_\_\_\_  
Email/Fax \_\_\_\_\_

## Infection Prevention Designee

Name \_\_\_\_\_  
Phone \_\_\_\_\_  
Email/Fax \_\_\_\_\_

Please send copies of any relevant microbiology cultures, medication administration record (MAR) or physician order sheet (POS), and immunization documentation.

# Example strategies for gap mitigation

<b><u>Domain 1:</u> General Infrastructure, Capacity, and Processes</b>	<b>No physician champion</b>  <b>No annual competency for PPE usage</b>
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- ▶ Recruit a champion
- ▶ Incorporate competency check-offs into annual skills fair

<b><u>Domain 2:</u> Antibiotic Stewardship for CDI Prevention</b>	<b>No strategies in place for reducing use of high-risk antibiotics (e.g. fluoroquinolones and 3<sup>rd</sup>/4<sup>th</sup> gen. cephalosporins)</b>
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- ▶ Use EMR system to prompt prescribers ordering select high-risk antibiotics for a justification
- ▶ Require pharmacy or an infectious disease physician to approve orders for targeted antibiotics

**Domain 3:  
Early Detection and  
Isolation, Appropriate  
Testing**

**Some providers test for cure**

**CDI status is not communicated by transferring  
facilities**

- ▶ Re-educate prescribers on appropriate testing and develop an easy-to-follow testing algorithm or decision tree
- ▶ Reach out to infection control staff at facilities that transfer patients regularly and request that they complete an Inter-facility Transfer Form

**Domain 4:  
Contact  
Precautions/Hand  
Hygiene**

**Contact precautions signs do not provide directions for hand hygiene and PPE usage**

**Staff do not always wear gowns and gloves when caring for CDI patients**

- ▶ Update Contact Precaution signs to incorporate written and visual directions for hand hygiene and PPE usage and distribute to all units
- ▶ Use PPE auditing data to reward most compliant staff in each unit

## **Domain 5: Environmental Cleaning**

**It's not clear which items are cleaned by EVS and which should be cleaned by clinical staff**

**The amount of time allotted for terminal cleaning is insufficient**

- ▶ Ensure that unit leaders work with EVS to develop chart of responsibilities
- ▶ All staff should be educated on cleaning expectations
- ▶ EVS supervisor and/or IP should perform routine audits of room cleaning to determine needs
  - ▶ More time
  - ▶ Training and/or a checklist

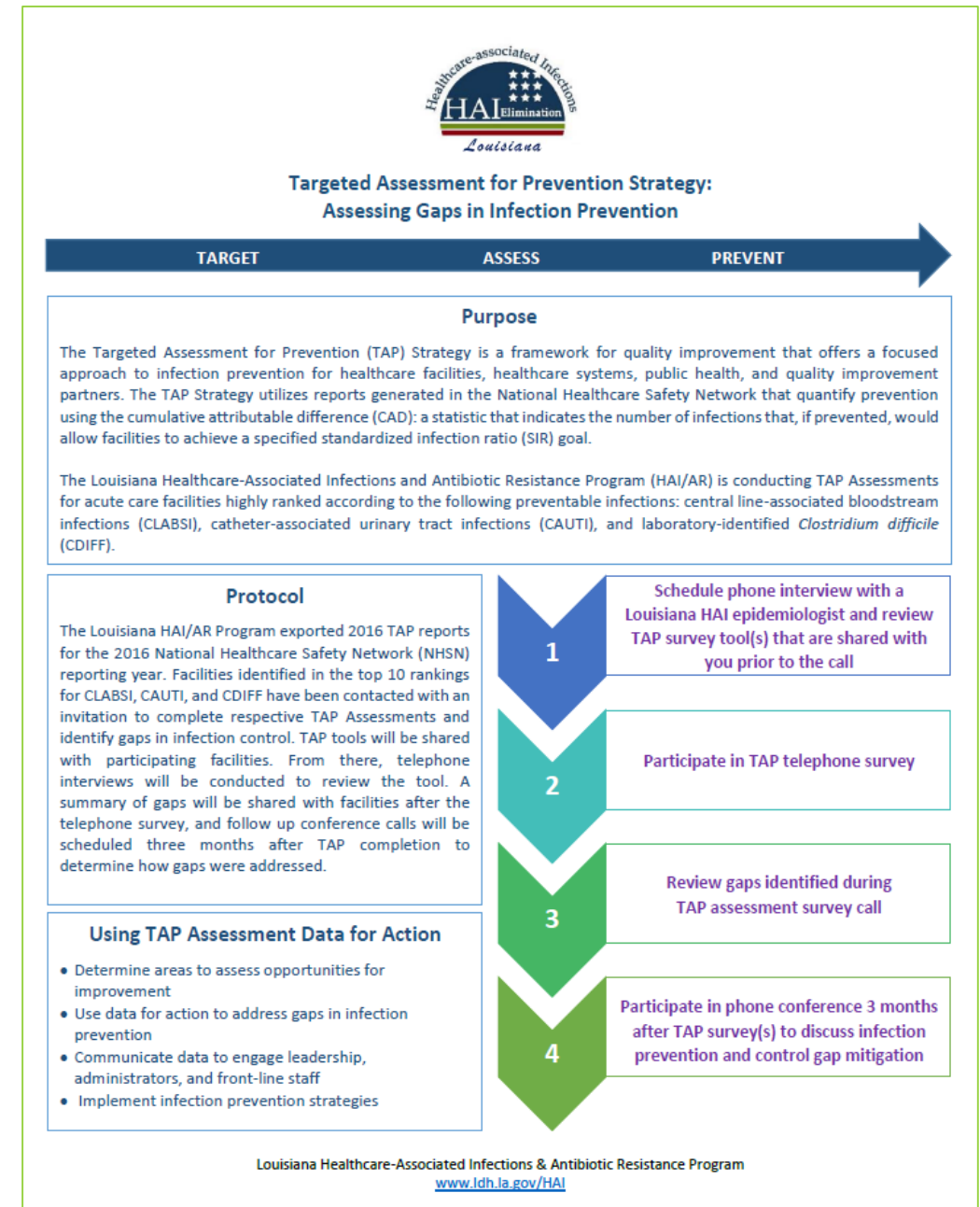
## Next Steps

- ▶ The HAI Program will monitor CDI data over the course of the next 9 months and provide regular reports
- ▶ If increases were detected, the HAI team would reach back out to Ann to determine what barriers the facility may be experiencing and to brainstorm potential solutions
- ▶ **CELEBRATE SUCCESSES!!**
  - Certificate of completion from the HAI Program
  - Internal newsletter spotlight
  - Bulletin Board display



# Summary

- ▶ CDC considers *C. diff* to be an urgent threat
- ▶ The TAP Strategy is a framework for quality improvement that offers a systematic way of identifying infection prevention gaps within healthcare facilities and provides resources to help address those gaps
- ▶ The TAP Strategy is available for *C. diff*, CLABSI, and CAUTIs
- ▶ Requires multidisciplinary collaboration to develop facility-specific, sustainable interventions to drive down infections
- ▶ Contact [Ashley.Terry@LA.gov](mailto:Ashley.Terry@LA.gov) to participate in the TAP Strategy.



# Questions?

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