

# Infection Prevention Back to Basics: Multi-Drug Resistant Organisms (MDROs)

Thank you for registering for and/or attending the [HQIC Webinar!](#) Subject Matter Experts Jamie Zapata and Rosie Bartel shared strategies for getting “back to basics” when it comes to preventing Multi-Drug Resistant Organisms (MDROs), particularly hospital onset Clostridium Difficile (C. diff) and Methicillin-Resistant Staphylococcus Aureus (MRSA) bacteremia as well as discussed methods for integrating the patient voice into infection prevention.

**Now, it is time to act!**

## Why Now

Over the last two years, progress toward eliminating Healthcare Associated Infections (HAIs) has been impacted by the COVID-19 pandemic. MDROs remain a significant risk to patient safety. According to the Centers for Disease Control and Prevention (CDC), on any given day, about 1 in 31 hospitalized patients has an HAI.

## Trends/Data

HAI Type	No. of Hospitals <sup>a</sup>	% Change in SIR <sup>b</sup>	95% CI	Preliminary 2021-Q3				2019-Q3			
				No. of HAIs Reported	No. of HAIs Predicted	Device/Patient Days or Procedures <sup>c</sup>	SIR	No. of HAIs Reported	No. of HAIs Predicted	Device/Patient Days or Procedures <sup>c</sup>	SIR
CLABSI <sup>e</sup>	3,215	48.4 <sup>d</sup>	(41.6 to 55.5)	4,741	4,573.59	4,539,805	1.037	2,761	3,951.77	3,911,645	0.699
CAUTI <sup>f</sup>	3,208	13.6 <sup>d</sup>	(8.4 to 19.1)	4,074	5,087.85	4,325,035	0.801	2,997	4,251.81	3,592,706	0.705
VAE <sup>g</sup>	1,343	60.2 <sup>d</sup>	(54.8 to 65.8)	11,353	7,097.22	1,036,989	1.600	4,553	4,559.15	639,187	0.999
SSI, colon surgery <sup>h</sup>	2,593	-9.2 <sup>d</sup>	(-15.2 to -2.8)	1,542	1,936.21	73,976	0.796	1,774	2,021.71	79,396	0.877
SSI, abdominal hysterectomy <sup>h</sup>	2,283	-4.1	(-15.5 to 8.7)	428	410.90	58,550	1.042	559	514.35	78,020	1.087
LabID MRSA bacteremia <sup>i</sup>	3,272	45.1 <sup>d</sup>	(37.0 to 53.6)	3,066	2,625.60	40,987,396	1.168	1,927	2,393.81	37,865,802	0.805
LabID CDI <sup>j</sup>	3,269	-14.5 <sup>d</sup>	(-16.7 to -12.2)	10,565	21,905.36	37,822,902	0.482	12,408	21,999.91	34,586,039	0.564

Source: Continued increases in the incidence of healthcare-associated infection (HAI) during the second year of the coronavirus disease 2019 (COVID-19) pandemic. | Infection Control & Hospital Epidemiology | Cambridge Corem (Link)

## Consider Common Barriers and Solutions

Review common barriers identified during the webinar and brainstorm ways to mitigate challenges to implementation in your organization.

- + Competing priorities for time/resources
- + No identified hospital or unit champion
- + Lack of team communication/timely reporting
- + Infection prevention turnover/new staff/new role
- + No process for MDRO surveillance and/or hand hygiene audits
- + Outdated staff education/informal process

## Perform a Root Cause Analysis

Fill in the [Fishbone Diagram](#) (PDF) to identify the causes and effects of an event and get to the root cause.

Fill in the [Plan-Do-Study-Act \(PDSA\) Worksheet](#) (PDF) to identify your goal and complete the PDSA cycle for test of change and improvement.

## Craft your AIM Statement

By (date), the team at (hospital) will implement (intervention) to improve (the problem) by (how much) to benefit (for whom).

*Example: By November 2022, we will form a team and begin monthly chart audits to understand variations in patient care to decrease hospital-acquired infections with a goal of obtaining and sustaining a zero rate.*

## Implement Changes with Leading Interventions and Best Practices

Beginner	Intermediate	Expert
Identify a leader or champion and form a multidisciplinary team.	Collect and analyze prevalence and incidence data	Present business case to <a href="#">leadership</a> (Link) to get buy-in
Conduct a risk assessment	Collaborate with environmental services to audit terminal <a href="#">cleans</a> (xlsx.)	Implement <a href="#">teach back methodology</a> (Link) regarding patient risk and expectations
Conduct a chart review of a recent C. Diff case. Identify opportunities for <a href="#">improvement</a> (PDF).	Prioritize the gaps to be addressed and develop an action plan.	Conduct a <a href="#">failure mode effects analysis</a> (Link)

## Incorporate Health Equity and Patient and Family Engagement

- + [Communication and Optimal Resolution \(CANDOR\)](#) (PDF) Toolkit enables health care organizations to respond immediately when a patient is harmed and to promote candid, empathetic communication and timely resolution for patients and caregivers.
- + [CDC FAQs about C. diff for patients and families](#) (PDF)
- + [CDC FAQs about MRSA for patients and families](#) (PDF)
- + [CDC Factsheets about MRSA for patients and families](#) (Link)

## Seek Guidance

*Not sure how to identify your organization's root cause? Need help getting started on implementing your selected intervention? Seeking feedback on your AIM statement?*

**Reach out to your HQIC clinical improvement consultant for assistance.**

## Additional Resources

- + **General**
  - o [Infection Prevention Back to Basics: Multi-Drug Resistant Organisms \(MDROs\) Presentation Slides](#) (PDF)
  - o [CDC MDRO Management Guidelines Library](#) (Link)
  - o [National Healthcare Safety Network \(NHSN\) Targeted Assessment Prevention \(TAP\) Report](#) (Link)
  - o [Actionable Patient Safety Solutions™](#) (Link)
- + **Clostridium Difficile (C. diff)**
  - o [CDC Clostridioides Difficile Infection \(CDI\) Facility and Unit Level Assessment Tool](#) (Link)
  - o [CDC STRIVE CDI Module](#) (Link)
  - o [Clostridium Difficile Checklist](#) (doc.)
  - o [TAP Facility Assessments](#) (PDF)
  - o [TAP CDI Implementation Guide](#) (Link)
- + **Methicillin-Resistant Staphylococcus Aureus (MRSA)**
  - o [CDC STRIVE MRSA Learning Module](#) (Link)
  - o [CDC MRSA Factsheets for Healthcare Personnel](#) (Link)
- + **Antimicrobial Stewardship**
  - o [Actionable Patient Safety Solutions™: Antimicrobial Stewardship Guide](#) (PDF)
  - o [CDC Core Elements of Antibiotic Stewardship Programs](#) (Link)
  - o [5 Tips to Improve Antibiotic Stewardship in Your Emergency Department](#) (Link)

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