

Clostridium difficile Infections

- **Data source:** CDC’s National Healthcare Safety Network (NHSN), Multidrug-Resistant Organism (MDRO) and *Clostridium difficile* Infection (CDI) Module
- **Definition:** http://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf
- **5-Year (2013) National Prevention Target:** 30% reduction in facility-wide healthcare facility-onset *C. difficile* LabID event
- **Metric:** Standardized Infection Ratio (SIR)
 - The SIR compares the observed number of healthcare-associated infections (HAIs) in the U.S. during a reporting period with the baseline U.S. experience
 - Risk adjustment: further analysis pending, with potential for facility-wide adjustment by facility type, bed size, and medical affiliation, and for location adjustment by patient location type and bed size
 - SIR < 1.0 means fewer HAIs observed during the reporting period than predicted from baseline data; SIR > 1.0 means more HAIs observed than predicted
- **Baseline period:** 2009-2010
- **Baseline data:** *C. difficile* LabID event data reported to NHSN during 2009-2010 from all acute care hospitals
 - 2009: 25 states reporting; 250 facilities reporting; 417 locations reporting; 15% intensive care unit (ICU)
 - 2010 (through Aug): 27 states reporting; 389 facilities reporting; 643 locations reporting; 14% ICU
 - Enrollment in NHSN MDRO/CDI module for CDI reporting:
 - Legislative mandate: NY (2009) plus CA and TN (mid-year 2010)
 - Recovery Act-supported: 8 states (2010)
 - Centers for Medicare and Medicaid Services (CMS) Quality Improvement Organization (QIO) use (as pilot): 5 sites (2010)

Facility Reporting: Baseline Period (2009-2010 through Aug)

Top 5 Location Types Reporting	2009 No. of Locations (%)	2010 (through Aug) No. of Locations (%)
Facility-wide Inpatient	218 (52)	342 (53)
Medical-Surgical Ward	29 (7)	41 (6)
Medical-Surgical ICU	25 (6)	32 (5)
Medical Ward	19 (5)	27 (4)
Surgical Ward	16 (4)	20 (3)

Metric Definitions

C. difficile laboratory-identified event (LabID Event): A positive laboratory assay for a toxin-producing *C. difficile* organism (e.g., toxin EIA, cytotoxin assay, toxigenic culture, PCR) from a stool specimen from a patient with no previous *C. difficile* positive laboratory assay in the prior 14 days.

Healthcare facility-onset (HO): LabID Event collected > 3 days after admission to the facility (i.e., on or after day 4, with day 1 as admission).

Incident *C. difficile* assay: A *C. difficile* LabID Event from an unformed specimen obtained from a patient > 8 weeks after the patient’s most recent *C. difficile* LabID Event, or the first *C. difficile* LabID Event for a patient with no previous one documented.

Facility-wide *C. difficile* infection healthcare facility-onset incidence density rate: Number of all Incident HO *C. difficile* LabID Events per month in a facility / Number of patient days for the facility x 10,000.