

# NEW MEXICO HEALTHCARE-ASSOCIATED INFECTIONS ANNUAL REPORT

Prepared by: New Mexico Healthcare-associated Infections Advisory Committee

January-December 2013

## Healthcare-associated infection prevention in New Mexico

Healthcare-associated infections (HAI) are infections patients can acquire while receiving medical treatment. The New Mexico Department of Health (NMDOH) and New Mexico (NM) HAI Advisory Committee have facilitated statewide and regional HAI prevention efforts since 2008. NMDOH receives both voluntary and mandatory data from healthcare facilities and publishes an annual surveillance report.

This annual report provides an update on NM HAI prevention progress in 2013. Facility-specific information is on the NMDOH website (<http://nmhealth.org/go/hai>) for hospitals reporting to NMDOH. Additional detail on methodology and infections can be found in the NM HAI Annual Report 2012 (<http://nmhealth.org/go/hai>). State-specific 2012 data for all states is included in the Centers for Disease Control and Prevention (CDC) 2012 HAI Progress Report ([www.cdc.gov/hai/progress-report/](http://www.cdc.gov/hai/progress-report/)) and Hospital Compare ([www.medicare.gov/hospitalcompare](http://www.medicare.gov/hospitalcompare)) provides quality and safety data on additional facilities in NM and nationally.

HAI prevention progress is tracked using a standardized infection ratio (SIR) which compares the current number of infections to the number of predicted infections based on national baseline data; lower SIRs indicate better progress (i.e., fewer infections). National prevention targets are set by US Department of Health and Human Services (HHS) and through the Healthy People (HP) framework. Infection data are collected through CDC's National Healthcare Safety Network (NHSN) database. HAI data provide healthcare facilities and public health agencies information needed to design, implement, monitor, and evaluate HAI prevention efforts.

### 2013 New Mexico key findings

- **Central line-associated bloodstream infection SIR met the national 2013 HHS prevention target**
- **Healthcare personnel influenza vaccination rate was better than the 2014 HP target**
- ***Clostridium difficile* facility-onset SIR was similar to national baseline but did not meet the 2013 HHS target**
- **Facility-onset methicillin-resistant *Staphylococcus aureus* SIR was better than the 2013 HHS target**

### What's inside?

**Page 2 & 3:** NM progress on CLABSI, CDI, MRSA, and HCP influenza vaccination

**Page 4:** HAI prevention: we all have a role



### NMDOH HAI Surveillance

#### Central line-associated bloodstream infection (CLABSI)\*

- A central line is a tube placed in a large blood vessel usually of a patient's neck or chest for giving medications, drawing blood, or for monitoring purposes. When not inserted correctly or kept clean, central lines can become a pathway for germs to enter the body and cause infections in the blood that can be serious and even deadly.

#### *Clostridium difficile* infection (CDI)\*

- A CDI occurs when a patient becomes ill from *Clostridium difficile* bacteria. Consequences of CDI range from diarrhea to life-threatening inflammation of the colon.

#### Methicillin-resistant *Staphylococcus aureus* (MRSA)

- MRSA is a bacteria that is resistant to many antibiotics. In the community, most MRSA infections are skin infections. In medical facilities, MRSA can cause life-threatening bloodstream infections, pneumonia and surgical site infections.

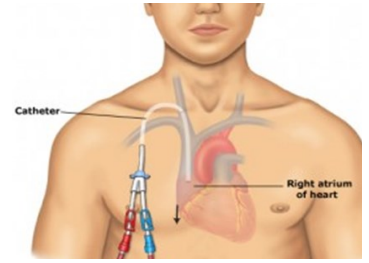
#### Healthcare personnel (HCP) influenza vaccination

- HCP (e.g., doctors, nurses, technicians, volunteers) can become ill with influenza (flu) and pass it to patients. It is recommended that HCP receive an influenza vaccination yearly to protect themselves and patients.

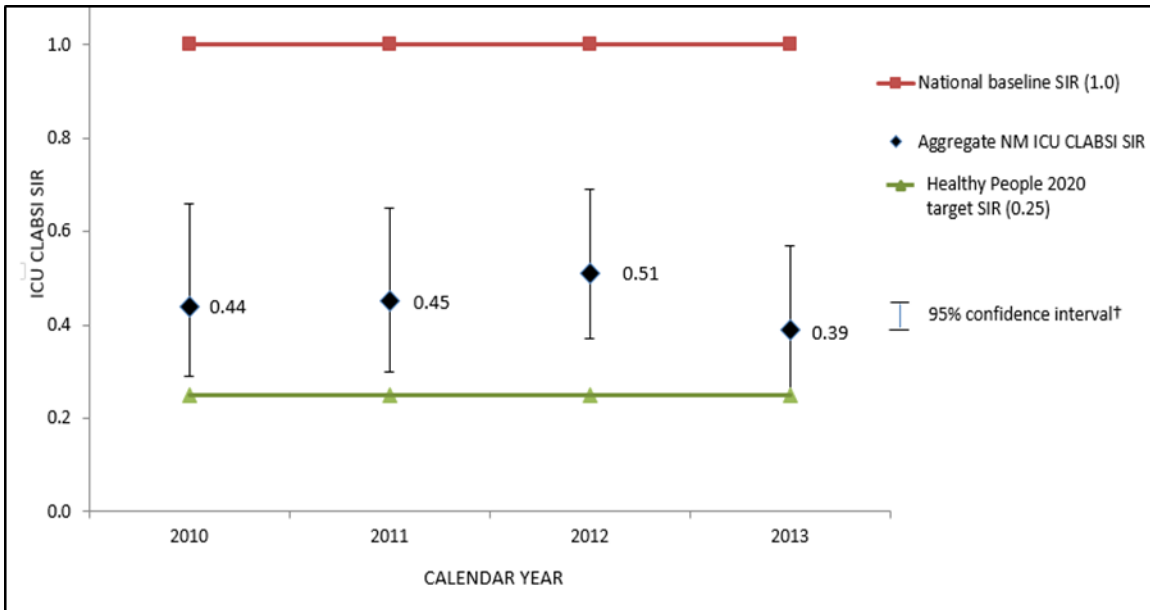
\*Acute care hospital data sharing with NMDOH as required by New Mexico Administrative Code.

# Central line-associated bloodstream infection (CLABSI)

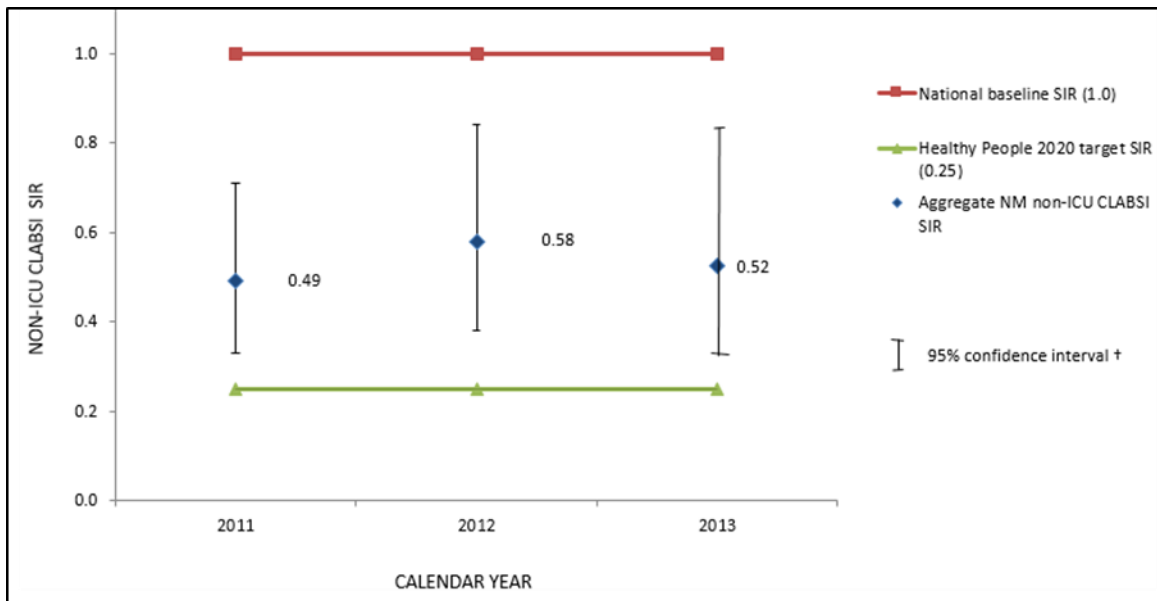
New Mexico hospitals began voluntarily tracking and sharing CLABSI data with NMDOH in 2008. Acute care hospitals are now expected to share NHSN CLABSI data per the NM Administrative Code. In 2013, 33 of 35 acute care hospitals shared data on CLABSIs in 69 intensive care units (ICU) and non-intensive care units (non-ICU). In 2013 this data included neonatal intensive care units (NICU) for the first time. The aggregate SIR for all units was 0.44 which was 56% less than predicted based on the national baseline. The NM SIR met the 2013 national HHS target (0.50) but more progress is needed to achieve the 2020 HHS target of 0.25 (lower SIRs indicate fewer infections). Hospitals will be expanding CLABSI monitoring into more wards in 2015.



**NM adult and pediatric ICU CLABSI SIRs for calendar years 2010—2013** (Note: Data for each year are statistically better than national baseline but not yet low enough to meet the Healthy People 2020 target.)



**NM non-ICU CLABSI SIRs for calendar years 2011—2013** (Note: Data for each year are statistically better than national baseline but not yet low enough to meet the Healthy People 2020 target.)



## ***Clostridium difficile* infection (CDI) and methicillin-resistant *Staphylococcus aureus* (MRSA)**

In 2013, laboratory-identified CDI and MRSA hospital-wide data were shared for the first time with NMDOH. CDI data were shared by 32 facilities under NM Administrative Code. MRSA data were voluntarily shared by 16 facilities.

Infection	NM aggregate 2013 SIR	95% confidence interval †	Statistical comparison between NM SIR and national baseline	HHS 2013 Target SIR
<b>CDI</b>	1.05	0.96, 1.14	■ No different than national baseline (SIR 1.00)	0.70
<b>MRSA</b>	0.27	0.14, 0.48	★ Better than national baseline (SIR 1.00)	0.75

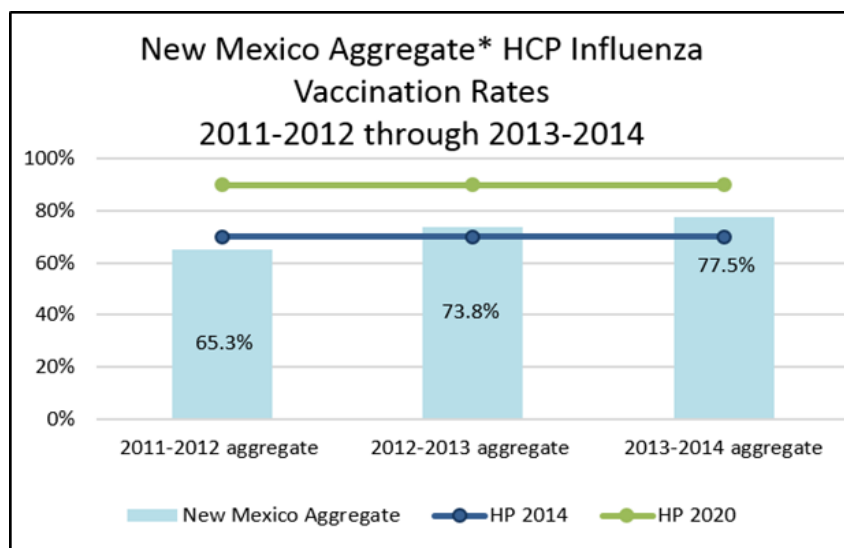
† The confidence interval indicates that 95% of the time, the true value of the SIR lies somewhere between the upper and lower limits of this range.

You can reduce your risk for CDI: 1) consult with your healthcare provider to reduce/eliminate use of two types of drugs that decrease stomach acids (proton pump inhibitors or PPIs sometimes called the “purple pill” and hydrogen pump blockers or H2 blockers sometimes called acid reducers) and 2) do not take antibiotics unnecessarily. Other risk factors for CDI include: 1) steroids or immunosuppressive medications; 2) prolonged hospital stays; and 3) advanced age.

## **Healthcare personnel influenza vaccination**

Annual influenza vaccination of healthcare personnel (HCP) can reduce influenza-related illness and its potentially serious consequences among HCP and their patients. Because persons infected with influenza virus (i.e., seasonal flu) can transmit influenza, even before showing symptoms, personnel who interact with patients or the patient care environment are encouraged to be vaccinated. The national Healthy People 2020 target for HCP influenza vaccination is 90%.

For the 2013-2014 season, the aggregate NM HCP influenza vaccination rate was 77.5% for all HCP at 27 voluntarily reporting healthcare facilities. This exceeded the HP 2014 target of 70%.



\* Beginning with this report, HCP includes all employees, licensed independent practitioners (physicians, physician assistants, and advance practice nurses), volunteers and students/trainees for all years shown. This aligns with the national HCP vaccination reporting definition.

## HAI prevention: we all have a role

Healthcare facilities throughout NM are working independently and in collaboratives to implement practices which reduce HAIs. They are educating staff on best practices, using checklists to assure important infection control steps are not missed, purchasing equipment designed to disinfect large spaces, and reaching out to their communities for prevention partners. In the end, we are all patients and need each other to make healthcare safer. See below for ways you can make a difference.

**Protect the power of antibiotics:** More organisms are developing resistance to antibiotics and few new antibiotics are coming into production. It is important to use the right antibiotics for the situation and to only use them when necessary.

- Patients: take antibiotics exactly as prescribed by your healthcare provider, do not expect your provider to prescribe antibiotics for all illnesses, do not self-prescribe antibiotics
- Healthcare providers: prescribe antibiotics correctly – get cultures, start the right drug promptly at the right dose for the right duration, reassess the prescription within 48 hours based on tests and patient exam
- NMDOH and healthcare facilities: work together to prevent infections, transmission, and resistance

**Reduce the opportunity for germs to spread:** Routine, thorough hand hygiene can stop germs and organisms from moving from one surface to another or from entering your body when you touch your eyes, mouth, or food with soiled hands. Proper environmental cleaning and safe injection techniques are also key prevention measures.

### Hand hygiene:

- Everyone, all the time: perform proper hand hygiene by scrubbing all surfaces of your hands with soap and water (or alcohol hand rub) for at least 20 seconds
- Patients: ask your healthcare provider to perform hand hygiene before providing care and, if you are a patient in a hospital, ask your visitors to wash their hands when they enter and leave your room
- Providers: perform hand hygiene in front of your patients so they understand the importance and see your commitment to their safety



### Injection safety:

- Patients: ask your provider if there will be a new needle, new syringe, and a new vial for your procedure or injection
- Providers: use single dose vials whenever possible and understand appropriate use of multi-dose vials; draw up all medications in a clean, designated area; always use a new needle and new syringe



## HAI prevention resources

These links provide more information on prevention measures and on progress toward reducing HAIs.

Information sheets on HAI, including CDI and MRSA: <http://www.shea-online.org/Patients.aspx>

Hand hygiene: <http://www.cdc.gov/handwashing/when-how-handwashing.html>

Safe injection practices: <http://www.oneandonlycampaign.org/>

New Mexico Department of Health HAI Program: <http://nmhealth.org/go/hai>