Healthcare-associated infections (HAI) are infections patients can acquire while receiving medical treatment. The New Mexico Department of Health (NMDOH) and New Mexico HAI Advisory Committee have facilitated statewide and regional HAI prevention efforts since 2008. NMDOH receives both voluntary and mandatory data from healthcare facilities via the National Healthcare Safety Network (NHSN) reporting system and publishes an annual surveillance report. This annual report provides an update on NM HAI prevention progress in 2018. Facility specific information, including data for reporting critical access hospitals is available on the NMDOH website (http://nmhealth.org/about/erd/ideb/hai). State specific 2017 data (the most recent available) for all states is included in the Centers for Disease Control and Prevention (CDC) 2017 HAI Data Report (www.cdc.gov/hai/data/portal/progress-report).

The standardized infection ratio (SIR) is a summary measure used to track HAIs over time. The SIR compares the actual number of HAIs reported to what was predicted, given the standard population (NHSN baseline), adjusting for several risk factors found to be significantly associated with differences in infection incidence. In other words, an SIR greater than 1.0 indicates more HAIs were observed than predicted, an SIR less than 1.0 indicates fewer HAIs were observed than predicted. National prevention targets are set by US Department of Health and Human Services (DHHS), this report uses Healthy People 2020 targets to set goals for HAI reduction in New Mexico. HAI data provide healthcare facilities and public health agencies information needed to design, implement, monitor, and evaluate HAI prevention efforts.

2018 New Mexico key findings

- Central line-associated bloodstream infection SIRs (0.36, 0.31) for ICU and non-ICU locations were better than the national baseline, meaning there were fewer infections than predicted.
- For the 2018-2019 season healthcare personnel (HCP) influenza vaccination rate was better than the Healthy People 2014 target, but below the 2020 target.
- Acute Care Hospitals did not meet the Healthy People 2020 target for reducing facility-onset Clostridioides difficile infections.
Healthcare personnel (HCP) 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.

For the 2018-2019 season, the aggregate NM HCP influenza vaccination rate was 84% among all HCP at 33 voluntarily reporting healthcare facilities. This exceeded the HP 2014 target of 70% and continues steady improvement toward the HP 2020 target of 90%.

*33 inpatient healthcare facilities voluntarily collected and submitted vaccination rates for employees, licensed independent practitioners (physicians, physician assistants and advance practice nurses), volunteers and students. The total numbers of personnel in all categories were used to create an aggregate rate. This aligns with the definition used for national HCP influenza vaccination reporting.

HAI Measures/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.

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

Methicillin-resistant Staphylococcus aureus (MRSA) - MRSA are bacteria that are 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)

In 2018, 27 NM acute care hospitals shared data on CLABSIs in a total of 63 units including intensive care units (ICU), and non-ICU wards.

<table>
<thead>
<tr>
<th>CLABSI</th>
<th>NM aggregate 2018 SIR</th>
<th>95% confidence interval</th>
<th>Statistical comparison between NM SIR and national baseline (1.00)</th>
<th>Healthy People 2020 Target SIR (0.50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ICU</td>
<td>0.31</td>
<td>0.13, 0.62</td>
<td>There were fewer infections observed than predicted.</td>
<td>⭐ Target Met</td>
</tr>
<tr>
<td>ICUs</td>
<td>0.36</td>
<td>0.21, 0.57</td>
<td>There were fewer infections observed than predicted.</td>
<td>⭐ Target Met</td>
</tr>
</tbody>
</table>

While the central line will be managed by health care professionals, there are some ways that patients can help themselves. 1) research the hospital and learn about its CLABSI rate; 2) speak up to help healthcare providers follow the best infection prevention practices; 3) ask your provider about the central line such as if it is necessary and how long it will be in place; 4) observe the bandage and the area around it. Tell a HCP if the bandage comes off or if bandage or area around it is wet or dirty; 5) do not get the central line wet; 6) tell a HCP if the area around the catheter is red or sore; 7) do not touch the catheter or let any visitors touch the catheter or tubing; 8) have all visitors wash their hands before and after their visit.

Clostridioides difficile infection (CDI) and methicillin-resistant Staphylococcus aureus (MRSA)

In 2018 CDI data were shared by 28 acute care hospitals under NM Administrative Code. MRSA bloodstream infection data were voluntarily shared by 20 acute care hospitals.

<table>
<thead>
<tr>
<th>Infection</th>
<th>NM aggregate 2018 SIR</th>
<th>95% confidence interval</th>
<th>Statistical comparison between NM SIR and national baseline (1.00)</th>
<th>Healthy People 2020 Target SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDI</td>
<td>0.94</td>
<td>0.85, 1.03</td>
<td>No significant difference between the number of observed and predicted infections</td>
<td>⌨ 0.70 Target not met</td>
</tr>
<tr>
<td>MRSA</td>
<td>0.52</td>
<td>0.31, 0.81</td>
<td>There were fewer infections observed than predicted</td>
<td>⌨ 0.50 Target not Met</td>
</tr>
</tbody>
</table>

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

BE INFORMED. BE EMPOWERED. BE PREPARED.

WHAT PATIENTS CAN DO

6 WAYS TO BE A SAFE PATIENT

1 SPEAK UP.
Talk to your doctor about all questions or worries you have. Ask them what they are doing to protect you.

- If you have a catheter, ask each day if it is necessary.
- Ask your doctor how he/she prevents surgical site infections. Also ask how you can prepare for surgery to reduce your infection risk.

2 KEEP HANDS CLEAN.
Be sure everyone cleans their hands before touching you.

3 GET SMART ABOUT ANTIBIOTICS.
Ask if tests will be done to make sure the right antibiotic is prescribed.

4 KNOW THE SIGNS AND SYMPTOMS OF INFECTION.
Some skin infections, such as MRSA, appear as redness, pain, or drainage at an IV catheter site or surgery site. Often these symptoms come with a fever. Tell your doctor if you have these symptoms.

5 WATCH OUT FOR DEADLY DIARRHEA.
(AKA C. difficile)
Tell your doctor if you have 3 or more diarrhea episodes in 24 hours, especially if you have been taking an antibiotic.

6 PROTECT YOURSELF.
Get vaccinated against flu and other infections to avoid complications.

[Image of healthcare professional and patient discussing infection control]

[Image of hands washing]

[Image of antibiotics]

[Image of symptoms]

[Image of diarrhea]

[Image of vaccination]

(CDC logo)