New Mexico Healthcare-associated Infections Annual Report: January-December 2017

Prepared by: New Mexico Department of Health *August 2018*

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 2017. 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 2015 data (the most recent available) for all states is included in the Centers for Disease Control and Prevention (CDC) 2015 HAI Data Report (www.cdc.gov/hai/surveillance/data-reports).

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, a SIR greater than 1.0 indicates more HAIs were observed than predicted, a 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.

2017 New Mexico key findings

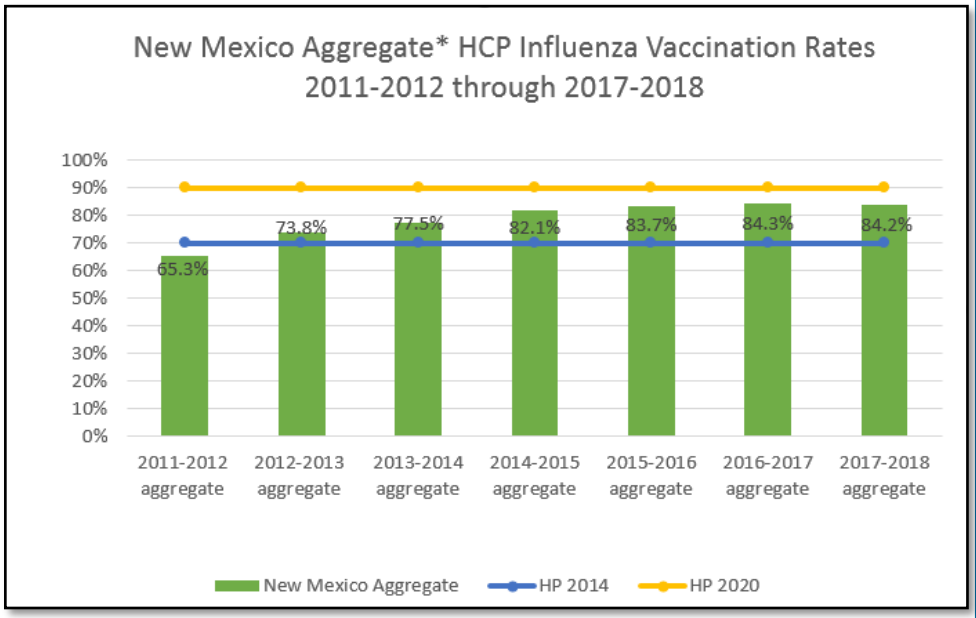
- Central line-associated bloodstream infection SIR (0.49)for non-ICU locations was better than the national baseline, meaning there were fewer infections than predicted.
- For the 2016-2017 season healthcare personnel (HCP) influenza vaccination rate was better than the Healthy People 2014 target, but below the 2020 target
- 39% of acute care hospitals met the Healthy People 2020 target for reducing facility-onset *Clostridium difficile* infections. (see facility specific information link above)

WHAT'S INSIDE?

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 2017-2018 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%.



Healthcare personnel influenza vaccinations are just one of the many strategies designed to reduce your risk of infections.

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.

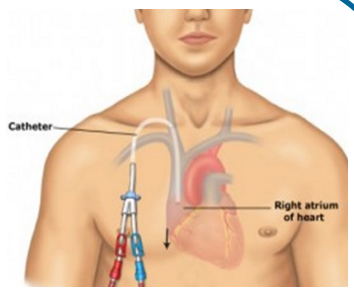
Clostridium difficile* infection (CDI) - A CDI occurs when a patient becomes ill from *Clostridium difficile* bacteria. Consequences of CDI range from diarrhea to life-threatening inflammation of the colon.

Methicillin-resistant *Staphylococcus aureus* (MRSA) - MRSA 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 2017, 27 NM acute care hospitals shared data on CLABSIs in a total of 63 units including intensive care units (ICU), and non-ICU wards.

CLABSI	NM aggregate 2017 SIR	95% confidence interval	Statistical comparison between NM SIR and national baseline (1.00)	Healthy People 2020 Target SIR (0.50)
Non-ICU	0.49	0.29,0.77	There were fewer infections observed than predicted.	Target Met
ICUs	0.95	0.69,1.28	No significant difference between the number of observed and predicted infections	Target not met

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.

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

In 2017 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.

Infection	NM aggregate 2016 SIR	95% confidence interval	Statistical comparison between NM SIR and national baseline (1.00)	Healthy People 2020 Target SIR
CDI	0.96	0.87,1.05	No significant difference between the number of observed and predicted infections	0.70 Target not met
MRSA	0.48	0.28, 0.77	There were fewer infections observed than predicted	0.50 Target Met

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.

IMPROVING ANTIBIOTIC USE

BE ANTIBIOTICS AWARE
SMART USE, BEST CARE

Do I really need antibiotics?

SAY YES TO ANTIBIOTICS

when needed for certain infections caused by **bacteria**.

SAY NO TO ANTIBIOTICS

for **viruses**, such as colds and flu, or runny noses, even if the mucus is thick, yellow or green. Antibiotics also won't help for some common bacterial infections including most cases of bronchitis, many sinus infections, and some ear infections.

Antibiotics are only needed for treating certain infections caused by bacteria.

Antibiotics do NOT work on viruses.

Do antibiotics have side effects?

Anytime antibiotics are used, they can cause side effects. When antibiotics aren't needed, they won't help you, and the side effects could still hurt you. Common side effects of antibiotics can include:

Rash

Dizziness

Nausea

Yeast Infections

Diarrhea

More serious side effects include *Clostridium difficile* infection (also called *C. difficile* or *C. diff*), which causes diarrhea that can lead to severe colon damage and death. People can also have severe and life-threatening allergic reactions.

Antibiotics save lives. When a patient needs antibiotics, the benefits outweigh the risks of side effects.

1 out of 5
medication-related visits to the ED are from reactions to antibiotics.

Source: www.CDC.gov/antibiotic-use/