Surveillance for *Staphylococcus aureus* (Staph) disease on Navajo Nation


**What is Staph?**

- Staph is a bacteria that lives in the **nose and on the skin**, usually not causing illness
- Staph can move to other body parts and cause disease (e.g. blood infection, pneumonia, osteomyelitis)
- Staph spreads through **contact with people and objects**
- Staph is usually treated with an antibiotic called methicillin. Some staph are resistant to methicillin and are called methicillin-resistant *Staphylococcus aureus* (MRSA). MRSA can be difficult to treat and can lead to death.

**What did we do?**

- Center for American Indian Health and Navajo Epidemiology Center conduct **surveillance for serious disease** caused by Staph
- Surveillance tracks changes in disease over time and allows us to evaluate the impact of interventions on disease
- **24 labs** on and around Navajo Nation and White Mountain Apache tribal lands participate

**What did we find?**

- Surveillance period: May 1, 2016 to April 30, 2017
- Number of cases identified: 159
- Staph cases occurred most commonly among older adults (≥50 years) with other diseases such as diabetes
- Navajo Nation has a higher burden of MRSA disease than the general US population

![Outcome of invasive Staph infections](chart.png)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized</td>
<td>86</td>
</tr>
<tr>
<td>Amputation</td>
<td>11</td>
</tr>
<tr>
<td>Death</td>
<td>6</td>
</tr>
</tbody>
</table>

**Rate per 100,000**

- Navajo Nation (2016-17): 26.0
- United States (2015) *: 18.8

* Source: [https://www.cdc.gov/hai/eip/ saureus.html#AR](https://www.cdc.gov/hai/eip/ saureus.html#AR)
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**What does this mean in your community?**

- First comprehensive and robust estimates of invasive Staph for Navajo Nation
- Staph contributes to serious disease on Navajo Nation
- Understanding the burden can help:
  - The public health community bring attention to this problem and plan interventions (e.g. community & provider education)
  - Healthcare administration plan resources
  - Healthcare providers manage patients by promoting earlier detection and proper treatment
- Further surveillance is needed to track the burden over time

**How can you protect yourself and your family from Staph infections?**

- Know the signs of a Staph infection and contact your healthcare provider if you think you have an infection
  - Most Staph skin infections appear as a bump or infected areas on the skin that may be red, swollen, painful, warm to the touch, full of pus, accompanied by a fever
  - Staph infections can also present with high fever that lasts for several days without any other symptoms
- Keep cuts and scrapes clean and covered
- Encourage good hygiene such as cleaning hands regularly
- Discourage sharing of personal items, including towels and razors
- For more information on Staph and MRSA infections, go to: https://www.cdc.gov/mrsa/community/patients.html

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