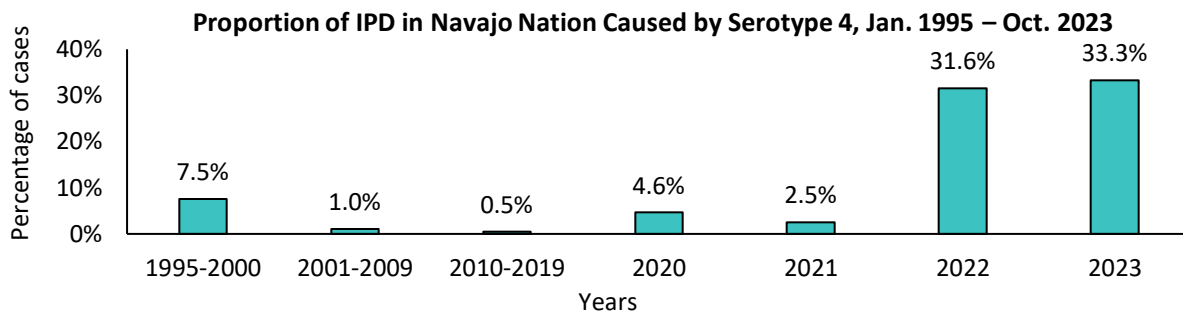




Serotype 4 Invasive Pneumococcal Disease (IPD) Information for Providers

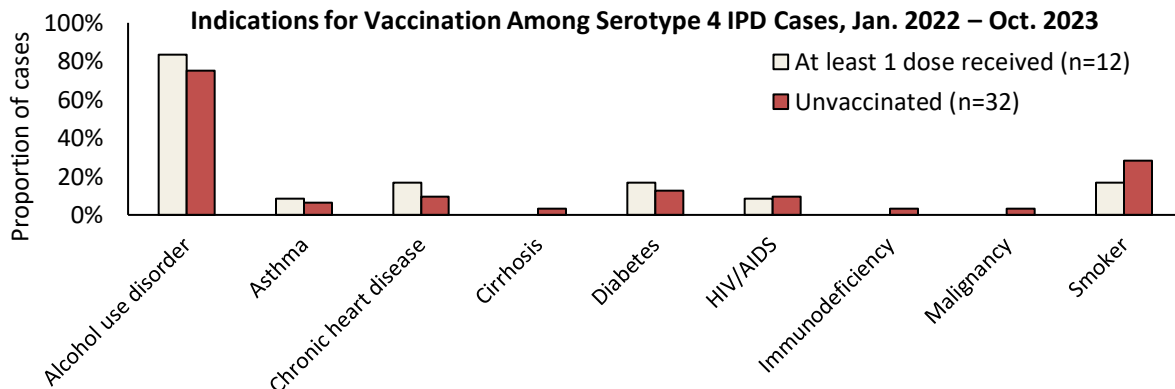
Background

- There are >100 serotypes of *Streptococcus pneumoniae* that cause disease. Pneumococcal conjugate vaccines (PCV) protect against some of these.
- The Navajo Epidemiology Center and the Johns Hopkins Center for Indigenous Health, in partnership with Indian Health Service and Tribal Health Facilities, monitor IPD in Navajo Nation through the Active Bacterial Surveillance program.
- After declining with PCV use, incidence of IPD in the Navajo Nation declined further during the early COVID-19 pandemic amidst implementation of mitigation measures.
- IPD incidence returned to pre-pandemic levels in 2022.
- A **resurgence of serotype 4 IPD** has been detected in Navajo Nation (see Figure). Note: serotype 4 has been included in all licensed and recommended pneumococcal vaccines.
- Serotype 4 now accounts for approximately **one-third of IPD cases** with available serotype data.



Summary of serotype 4 IPD in Navajo Nation

- Serotype 4 IPD occurred routinely prior to PCV introduction in 2001. It was then virtually eliminated until the resurgence in 2022.
- Since 2022, all serotype 4 IPD cases (n=44) have occurred among **adults** (median age: 39 years).
- **Pneumonia** is the most common clinical syndrome of serotype 4 cases (91% of cases).
- Most cases **lived in a private residence** (84%) and resided in Gallup service unit (59%); serotype 4 cases have been detected across Navajo Nation.
- 73% of serotype 4 cases occurred in unvaccinated individuals, of whom 25 (78%) had an indication for vaccination (most commonly alcohol misuse or smoking; see Figure).



Identify and vaccinate adults ≥65 years and adults 19-64 years with indications for pneumococcal vaccine:

<https://www.cdc.gov/vaccines/vpd/pneumo/hcp/who-when-to-vaccinate.html>