

## Sample

Title: High Level of Pneumococcal Vaccination among Alaska Native Adults

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Background: Alaska Natives (ANs) have age-adjusted rates of invasive pneumococcal disease 2-3 fold greater than non-Native Alaskans. The State of Alaska has recommended universal vaccination of adults 55 years and older since 1994. Numerous interventions have been utilized to increase adult AN pneumococcal vaccination rates.

Purpose: We evaluated immunization rates in AN adults 55-64 years and 65+ years during the period 1986-2000 to evaluate pneumococcal vaccination rates.

Methods: We searched for documentation of pneumococcal vaccination in medical chart and computerized medical records at tribal and public health nursing facilities for randomly selected samples of ANs registered at a tribal health facility from 4 tribal regions who were >55 years of age between 1986 through 2000.

Results: The proportion of AN adults >65 years of age in the 4 regions who had ever received pneumococcal vaccine increased from 51% in 1986 to 86% by 2000. For 2000, AN adults >65 years of age had a higher immunization rate (86%) than 55-64 year olds with (71%) or without (44%) underlying conditions. Compared with persons aged 55-64 who had no underlying conditions, vaccination was more common among 55-64 year-olds with diabetes (93%, odds ratio [OR]=16.6,  $p<.001$ ), chronic lung diseases (80%, OR=5.2,  $p=.002$ ), and heavy alcohol users (63%, OR=2.15,  $p=.08$ ).

Conclusion: Pneumococcal vaccination rates in AN elders increased during 1986-2000. Vaccination rates in 2000 were higher in 65+ year olds than 55-64 year olds. 55-64 year olds with underlying medical conditions had higher immunization rates than those without. The immunization rates in 2000 for both 55-64 year old (overall 63%) and 65+ year old (overall 86%) ANs were significantly higher than reported in the Behavioral Risk Factor Surveillance System (BFRSS) for all U.S. 55-64 year olds (24.0%) or 65+ year olds (61.2%).

*Dissemination Plan: Submission of a manuscript for publication in a peer-reviewed scientific journal following Tribal approval process; article in regional Alaska news outlets; presentations to regional Boards, health directors, and health care providers.*

*Research gaps remaining: Explore ways to further increase vaccination rates among AN adults, especially those without underlying conditions.*

(329 words)