

Using Syndromic Surveillance Data to Model Strategies to Increase Influenza Vaccine Coverage for the 2015-2016 Influenza Season, Portland Area Indian Health Service

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PRESENTATION FORMAT: 15 minute oral presentation

TOPIC/TARGET AUDIENCE: Epidemiologists, Immunization Program Coordinators, Public Health Managers

ABSTRACT: Background: Influenza is a major cause of morbidity and mortality for American Indians/Alaska Natives. Annual influenza transmission now begins 2-3 months earlier than before the 2009-2010 H1N1 pandemic. Syndromic surveillance data can be used to plan future influenza vaccination campaigns.

Methods: Influenza vaccination coverage and influenza-like illness (ILI) estimates from the Portland Area IHS ILI Awareness System during the 2014-2015 influenza season were used to determine influenza vaccine uptake and timing of influenza transmission. Projections of future influenza vaccine coverage were formulated with four strategies: 1) starting sooner; 2) extending maximum vaccination duration; 3) increasing vaccinations given weekly; 4) combinations of these strategies.

Results: Vaccination began in week 35; the maximum influenza vaccination was from 10/4/14-11/1/14 with 2,563 vaccines given per week on average. The maximum vaccination uptake was in week 40 (2,700). Influenza transmission lasted 13 weeks (began week 46, peaked week 52). Projections of future vaccination coverage showed no single strategy could achieve 50% coverage by week 48; using two or more strategies met this level.

Conclusions: Two or more strategies are needed to achieve vaccination levels capable of disrupting influenza transmission. Further studies to assess clinic capacity and patient demand for influenza vaccination are needed.

OBJECTIVE(S): Describe the rationale for increasing influenza vaccination coverage.
Demonstrate how ILI syndromic surveillance data can be used to make future projections
Discuss the limitations of this method and the need for further study.

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