Nevada State Immunization Program

2012 AIM Bull’s Eye Nomination

Cocooning Program

Background Description

(A) Brief Background on the Immunization Issues or Problems Addressed

Pertussis has been on the rise worldwide since about 1990. This highly contagious respiratory disease was thought to have been greatly diminished with the infant DPT and DTaP childhood vaccine series, first initiated in the early 1950s. Unfortunately, waning of vaccine immunity was noted in adolescents and adults. In 2001, the Global Pertussis Initiative reviewed research findings and selected a strategy to stop the increasing cases and risks of pertussis, especially to infants less than 1 year of age. This strategy was called “cocooning” and was defined as “immunization of family members and close contacts of the newborn.” In 2005, two Tdap booster vaccines became available in the United States. Nevada is now known as the leading national model in cocooning because of its success and scale in cocooning.

(B, C) Goal/Major Purpose of the Program/Initiative; Target Population or Audience

The Nevada State Immunization Program, based its Cocooning Program on evidence-based research, and piloted the first full-scope cocooning program in the United States on July 5, 2006 with the largest birthing hospital in northern Nevada. The goals of the program are to: 1) decrease the number of pertussis cases in Nevada by focusing on the high-risk population of newborns and infants less than 1 year of age; and 2) protect health care workers and other close contacts from pertussis while cocooning the newborn.

(D) Annual Budget and Funding Sources

Nevada’s Cocooning Program has been funded by discretionary 317 funds to pay for a Special Projects Manager and Tdap vaccine. For calendar year 2012, a total of $38,972 will be
spent on the Special Projects Manager who coordinates the Cocooning Program. Per federal fiscal year (spend plan year) 28,930 doses of Tdap were purchased at a cost of $746,204.70.

(E) Timing of the Program/Initiative

Nevada’s Cocooning Program has been in effect since July 2006. In April 2007, Dr. Anne Schuchat of the CDC came to Nevada, to speak during National Infant Immunization Week and praised Nevada’s Cocooning Program, highly encouraging Nevada to share its experiences with other hospitals and states. Since 2006, all 19 birthing hospitals and 30 OB/GYN offices are cocooning on some level in Nevada.

Justification

(F) Innovation

The Nevada State Immunization Program has been innovative in several ways in cocooning. 1) Presented continual updates on Nevada’s cocooning efforts at five of the last six National Immunization Conferences. 2) Hosted a regional cocooning conference in 2011 and a national cocooning conference in 2012. 3) Continual collaboration between hospitals and OB/GYN providers with the development of policies, procedures, standing orders, consent forms, and other needed documentation to save time and effort. 4) Development of postpartum cocooning with birthing hospitals and antepartum cocooning with OB/GYN providers. 5) Continual education of the importance to cocoon.

Nevada’s Cocooning Program is different than other cocooning programs because Nevada has implemented cocooning on both the postpartum and antepartum level. Additionally, Nevada has 100% of its birthing hospitals and 30 OB/GYN cocooning.

The obstacles that have been overcome include: 1) creating policies, procedures, and standing orders for the birthing hospitals and OB/GYN providers; 2) transferring expiring Tdap
vaccine from one birthing hospital to another to prevent wastage; 3) getting every birthing hospital cocooning; and 4) the continual recruitment of OB/GYN’s (non-typical vaccinators).

(G) Effectiveness

This program has achieved its goals by implementing cocooning at the postpartum and antepartum level, encouraging health care workers to be vaccinated, and encouraging ER’s and urgent cares to use Tdap instead of Td on their patients.

Nevada measures its success via the evaluation of (1) the progressive addition of each birthing hospital in Nevada wanting to cocoon against pertussis; and (2) the low case incidence rate of pertussis in Nevada since 2006, despite the pertussis epidemic in California in 2010 and the increased outbreaks and epidemics in 2012. Per the CDC, the national case incidence rate for pertussis as of September 20, 2012, is 9.3/100,000 people. The Nevada case incidence rate is 2.33/100,000 people with no infant deaths. (3) The increasing number of doses of Tdap given monthly at each birthing hospital and OB/GYN.

(H) Potential for Replication

With Nevada being the national leading model in cocooning it is imperative that the program can be replicated. The Special Projects Manager travels the United States educating others on how to start their own programs and have seen it replicated in many states with or without 317 funds.

The biggest challenges faced were/are: (1) getting buy-in from the nursing, pharmacy and infection control leadership to commit to the increase in work load; (2) obtaining their Agreement to Participate for use of 317 funds; (3) conducting site visits; and (4) educating them to follow CDC recommendations for safe vaccine storage and handling, including appropriate vaccine storage units. Today, Nevada faces a new challenge with new rules regarding 317 vaccine use.