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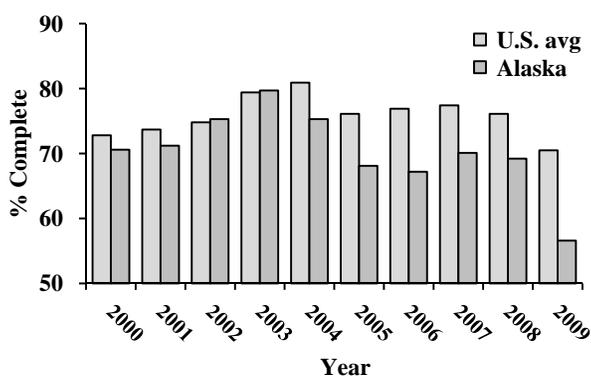
## Improving Immunization Coverage Rates in Alaska's Children

### Background

Every year since 1994, the U.S. Centers for Disease Control and Prevention (CDC) has conducted the National Immunization Survey (NIS) to determine coverage rates for vaccines recommended by the Advisory Council for Immunization Practice for children aged 19–35 months. The NIS consists of a list-assisted random-digit-dialing telephone survey followed by a mailed survey to childhood immunization providers.

Examination of NIS coverage data over the years is made more complex because the standard being assessed is revised periodically. However, in 2009, the national average for completion of the 4/3/1/0/3/1/4 (“0” = Hib series, which was excluded from the 2009 analysis due to a national shortage of this vaccine that year)<sup>1</sup> standard series was 70.5%, while Alaska's coverage rate was 56.6% (Figure 1). With this coverage rate, **Alaska ranked 49<sup>th</sup>** among all states.

**Figure 1: Estimated Vaccine Coverage for the Standard Series\* among Children Aged 19–35 Months, National Immunization Survey — U.S. and Alaska, 2000–2009<sup>2</sup>**



\*Standard series by year:

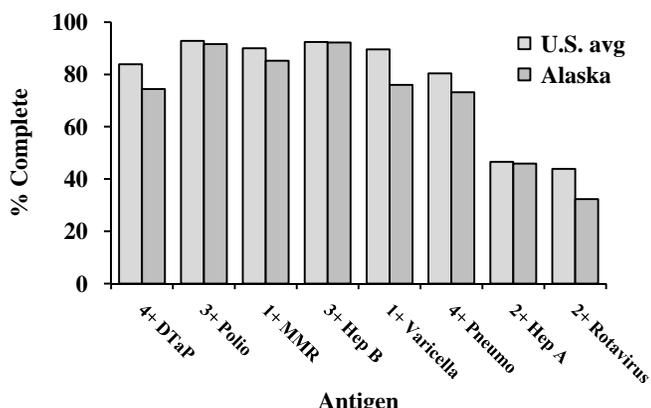
2000–2004 = 4 DTaP/3 Polio/1 MMR/3 Hib/3 Hep B

2005–2008 = 4 DTaP/3 Polio/1 MMR/3 Hib/3 Hep B/1 Varicella

2009 = 4 DTaP/3 Polio/1 MMR/0 Hib/3 Hep B/1 Varicella/4 Pneumo

Alaska ranked below the U.S. average for all standard series vaccines included in the 2009 ranking (Figure 2). Of particular concern, Alaska ranked 48<sup>th</sup> in the country for 1+ MMR (85.2%) and 50<sup>th</sup> for 1+ varicella (76.0%). Alaska also ranked in the bottom 10% of states for completion of 4+ DTaP and 3+ rotavirus vaccines.

**Figure 2: Estimated Vaccine Coverage for Individual Antigens among Children Aged 19–35 Months, National Immunization Survey — U.S. and Alaska, 2009<sup>3</sup>**



### How to Improve Alaska's Rates

There are numerous challenges to increasing immunization rates, including the increasingly complex schedule and vaccine safety concerns; however, solutions may be found through specific interventions (Box).

#### Box. How can we improve our immunization rates?

##### Alaska Division of Public Health (DPH)

DPH is attempting to increase rates statewide by:

- Strengthening partnerships with health care providers;
- Surveying parents to determine perceived barriers to immunizations;
- Increasing educational opportunities for providers and parents;
- Using VacTrAK (Alaska's Immunization Information System) for development and publication of immunization coverage rates for specific communities.

##### Individual health care providers

Evidence-based provider interventions<sup>4</sup> include:

- Implementing reminder/recall systems
  - Remind parents/patients when vaccines are due and call them back for missed appointments
- Reducing missed opportunities to vaccinate
  - Review each child's immunization history during *each* encounter to determine vaccines indicated
  - Be knowledgeable about vaccine contraindications
- Maintaining accurate and up-to-date records
  - Enroll in VacTrAK<sup>5</sup>
  - Utilize VacTrAK as a tool to facilitate vaccine delivery for individual patients and to see how well your facility is providing immunization services
- Educating concerned parents
  - Discuss the benefits/risks of vaccinations
  - Provide patients with listing of websites that provide current and accurate information about vaccines (e.g., [www.immunize.org](http://www.immunize.org), [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines), [www.aap.org/healthtopics/immunizations.cfm](http://www.aap.org/healthtopics/immunizations.cfm))
- Establishing an environment in which your entire clinic team is committed to improving immunization coverage of your patients
  - Discuss the importance of immunizations with all staff (both medical and non-medical) who interface with patients

### References

- 1 CDC. Changes in Measurement of *Haemophilus influenzae* serotype b (Hib) Vaccination Coverage – National Immunization Survey, United States, 2009. MMWR 2010;59 (No. 33): 1069-1072. Available at: <http://www.cdc.gov/mmwr/PDF/wk/mm5933.pdf>
- 2 CDC. U.S. Vaccination Coverage Reported Via NIS, 2000-2009. Available at: <http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#chart>
- 3 CDC. National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months – United States, 2009. MMWR 2010;59 (No. 36): 1171 – 1177. Available at: <http://www.cdc.gov/mmwr/PDF/wk/mm5936.pdf>
- 4 American Academy of Pediatrics, Increasing Immunization Coverage, *Pediatrics*, June 2010;125 (No. 6):1295 – 1303. Available at: <http://pediatrics.aappublications.org/cgi/reprint/125/6/1295?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=immunization+coverage&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT>
- 5 Alaska Section of Epidemiology. VacTrAK – All Aboard! *Bulletin* No. 3, February 17, 2011. Available at: [http://www.epi.alaska.gov/bulletins/docs/b2011\\_03.pdf](http://www.epi.alaska.gov/bulletins/docs/b2011_03.pdf)