



## PREVENTION OPPORTUNITIES UNDER THE BIG SKY

### IMPROVING CHILDHOOD IMMUNIZATION RATES IN MONTANA: SIGNS OF PROGRESS

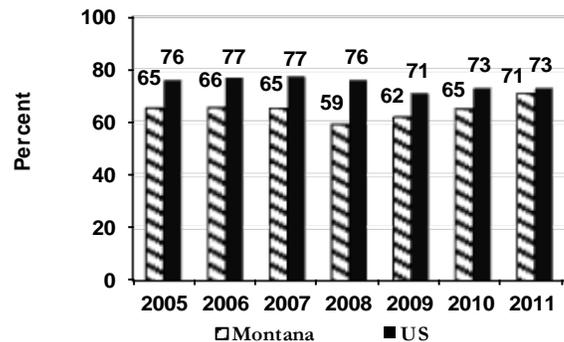
In April 2010, *Montana Public Health* described the very low immunization rate of Montana children aged 19-35 months ("Montana, The Last Best Place, Is Unfortunately Also Last in the Country in Childhood Immunization").<sup>1</sup> From 2004 to 2010, Montana ranked in the lowest quintile among states for immunization coverage in this age group.<sup>2</sup> (Figure) In 2008, the state had the distinctly dubious distinction of ranking 50th with regards to the common childhood series 4:3:1:3:3:1 (4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HBV, 1 Varicella) with only 59% of the children assessed considered up-to-date; 17 percentage points less than the national average. The Department of Public Health and Human Services (DPHHS) Immunization Program worked with local public health agencies, private clinicians and other partners, to develop a strategic approach to improve childhood immunization rates. Recent estimates from the National Immunization Survey (NIS) demonstrate notable improvement. In March 2011, 71.3% of Montana children aged 19-35 months were considered up-to-date for 4:3:1:0:3:1:4 (4 DTaP, 3 Polio, 1 MMR, 0 Hib\*, 3 HBV, 1 Varicella, 4 PCV). The national average at that time was 73.1%. Although this indicates significant improvement, additional work is needed. This issue of *Montana Public Health* describes three of the initiatives taken by DPHHS, local health agencies and other partners that we believe are leading to improved immunization rates.

#### Standardized review and enforcement of immunization requirements in licensed childcare facilities

The Administrative Rules of Montana (ARM) require all childcare facility attendees to have received certain vaccines. Before 2010, the number of childcare facilities reviewed was limited and efforts to bring up to date or exclude children not in compliance varied. In 2011, the DPHHS Immunization Program required contracting local health departments to increase inspection of childcare facilities within their jurisdictions and clarified enforcement responsibilities. The authority allows local health officers and the licensing agency to exclude children not meeting immunization requirements. In 2011, over 600 (53%) of 1,139 childcare facilities were visited by public health nursing staff. These staff reviewed 16,755 immunization records compared with 1,100 records from 109 facilities reviewed in 2009. Ninety-two percent of immunization records reviewed by public health nurses in 2011 were up-to-date per ARM compared with approximately 35% in 2009.

**Medical Exemption Review Panel** A child attending a childcare facility may be exempted from required immunization(s) if, a physician signs a medical exemption form stating a medical contraindication exists. This authority is interpreted broadly, and a small number of physicians grant medical exemptions to immunizations because of parents' fear of autism, unsubstantiated allergies, and other reasons for which there is no medical evidence to support exemption. When public health nurses discover medical exemptions to immunization(s) for which the documented evidence seems insufficient, these nurses alert the State Medical Officer. Since June 2011 the

Figure. Percent of children, 19-35 months, with complete immunization coverage\*, NIS, Montana and US, 2005-2011 mid year estimates.



State Medical Officer received 44 medical exemptions thought to lack sufficient evidence. A review panel (consisting of two family medicine physicians, two pediatricians, and two infectious disease physicians) advises the State Medical Officer on these medical exemptions. The panel reviews exemptions and provides an opinion as to whether sufficient evidence was presented to warrant the exemption. If the panel finds more evidence is required to justify the exemption, the State Medical Officer then sends a certified letter to the physician requesting additional information. If additional information is not provided, the medical exemption is voided. This use of the medical exemption review panel is unlikely to improve Montana's childhood immunization rates substantially, yet the panel's role in preventing dangerous outbreaks in facilities where groups of under-immunized children are enrolled should not be minimized.

\* Haemophilis influenza, type B was not included in CDC's analysis due to changes in measurement of vaccine and vaccine shortage.

**Modernizing DPHHS's Immunization Information System** An Immunization Information System (IIS) is a population-based electronic information system that consolidates immunization-related data among multiple health care providers, generates reminder/recall notices, and assesses immunization coverage. The National Vaccine Advisory Council (NVAC) recommends state-based IIS fulfill 12 minimum

functional standards. A comprehensive review of Montana's IIS determined it did not meet the minimum functional standards. Consequently, the outdated IIS was replaced in November 2011 with a highly functional IIS called *imMTrax*. The capabilities of *imMTrax* include a reminder/recall system and a forecasting algorithm, thereby enabling prediction of a child's missing immunizations with greater accuracy.

### **Recommendations to clinicians, health departments, and others who care for children**

(Clinicians)

- Provide age-appropriate vaccinations as recommended by the ACIP and American Academy of Pediatrics.
- Do not miss opportunities to vaccinate: use each patient visit as an opportunity to vaccinate.
- Establish practices that remind clinicians when vaccines are due and recall patients due for vaccination.
- Educate parents about the importance of vaccination for their children.
- Encourage parents to be sure their children are up-to-date with vaccinations.

(Local Health Departments, childcare providers)

- Use data provided by DPHHS to assess immunization coverage.
- Establish reminder/recall systems and assure Montana children are up-to-date on their immunizations.
- Work with local partners to identify children behind on immunizations and get those children immunized.

For more information, contact the Immunization Section at 406-444-5580 and see [www.immunization.mt.gov](http://www.immunization.mt.gov).

#### References

1. DPHHS, PHSD. Montana, the last best place is unfortunately also last in the country in childhood immunization. *Montana Public Health* 2010; 5: 1-2.
  2. National Immunization Survey (NIS) 2008-2010, <http://www.cdc.gov/vaccines/stats-surv/default.htm>.
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