

# Colorado childhood immunization rates: Policy and practice

## Colorado Health Institute, June 2005

## Q: What is the purpose of this report?

A: The Centers for Disease Control and Prevention (CDC) ranked Colorado 50<sup>th</sup> in vaccination coverage for 2-year-olds in 2002 and 2003 for the combined 4:3:1:3:3 immunization series that includes diphtheria, tetanus and pertussis (DTaP); polio; measles, mumps and rubella; haemophilius influenzae type b (meningitis); and hepatitis B. Because of the media attention and political polarization that resulted, The Colorado Trust and Caring for Colorado Foundation asked the Colorado Health Institute (CHI) to look beyond the ranking and clarify the nature of the problem and identify issues that need attention.

#### Q: What are the major findings?

A: Despite low coverage rates (63 percent in 2002 and 68 percent in 2003) on the combined series listed above, Colorado 2-year-olds have immunization rates that approach recommended guidelines for all individual vaccines except the fourth dose of DTaP. The CHI study, however, identified three interrelated policy issues that need attention from the state, and public and private health care providers: timeliness of immunizations, under-immunized populations and administration of the DTaP vaccine. (See attached Key Findings for more information).

Q: The report notes there is a risk of outbreaks if children are under-immunized. What is that risk? A: Pockets of under-immunized children exist throughout the state related to geographic location, family income and cultural factors. Because the state does not have a centralized immunization registry, however, these areas are difficult to identify accurately, making it a challenge to anticipate where an outbreak might occur for a given disease.

Q: What is the primary reason these pockets of under-immunized children exist?

A: Poverty is the single most commonly cited risk factor for under-immunization. Because poor children rely heavily on the public health system, they are disproportionately affected when incidences such as vaccine shortages and funding cuts occur. In Colorado, disparities in coverage are most visible among Hispanic children.

Q: The report notes funding is a problem: Does Colorado provide less money for vaccines than other states? A: It is difficult to compare money allotted for immunizations among states because funding comes from various sources – federal, state and private – and is often a small part of a large pool of money. Colorado's situation is affected by its spending restrictions. In 2001, a national shortage of the DTaP vaccine led a number of states to purchase higher-priced vaccines with state funds. Colorado was not able to do likewise because of budget constraints. Immunization experts say vaccine shortages are likely to recur, meaning the state will have to deal with similar issues in the future.

Q: Is the state addressing any of the issues identified by CHI related to immunization timeliness and coverage for the fourth DTaP booster?

In the most recent legislative session, the General Assembly passed and Governor Bill Owens signed a bill to notify parents when their children are due for immunizations. The authority for this reminder/recall parental notification system rests with the Colorado Department of Public Health and the Environment in consultation with the Department of Health Care Policy and Financing. The

bill does not require children to be immunized, but allows parents to voluntarily have their children's names placed in a state immunization tracking system by a licensed health care provider or public health department. A number of organizations (local health departments, community health clinics, physicians and others) also make achieving a high immunization rate a priority. Additional support is needed, however, to help them track children and find pockets of low immunization coverage.

Q: How can we apply solutions that work (such as the Denver Health and Kaiser Permanente's reminder/recall systems) throughout the state?

The newly signed legislation is a first step in developing an effective outreach strategy to get children covered at the appropriate time for the full immunization series recommended by CDC. An integral part of an effective reminder/recall system is a fully inclusive immunization tracking system or registry. Colorado is building such a system one practice at a time with plans to include 95% of children in the registry in the next five years. The biggest public health challenge prior to a comprehensive statewide registry may be finding ways to target pockets of need related to geography, income, and cultural values and practices.

#### Q: What are the next steps?

The CHI report offers three options based on its review of the immunization literature and interviews with expert informants for improving Colorado's immunization rates.

- Create a state-level vision and plan that strengthens coordination between the programs currently administered by the Department of Public Health and the Environment and the Department of Health Care Policy and Financing, and includes private sector stakeholders such as health plans and the physician community. Such a comprehensive coordination effort will require leadership at the highest level of state government, that is, the Governor's Office or its designee.
- Invest in information systems to improve data for planning, evaluation and immunization program
  monitoring purposes. This step could include an immunization registry at the community level
  or a coordinated statewide effort. Alternatively, developing health information networks in
  local communities that are capable of exchanging health information at the patient level can
  fulfill a similar tracking function.
- Make strategic investments that improve access to immunizations and address Colorado priorities.
   Ensuring Colorado children receive vaccinations according to the recommended schedule is likely to require additional resources and investments. Until a state plan exists, funders should assess the merits of immunization program proposals by certain criteria, including:
  - Identification of target populations, with special consideration for rural, minority and other needy groups
  - ✓ Links between intervention goals and identified population needs
  - ✓ Emphasis on Colorado's context, including recognition of the current administrative infrastructure for immunization outreach and the access issues that put certain population groups at risk for being under-immunized
  - ✓ Use of evidence-based interventions and efficient use of existing providers.

The CHI immunization study is available at <a href="https://www.coloradohealthinstitute.org">www.coloradohealthinstitute.org</a> both as a full report and a policy brief.

The Colorado Health Institute (CHI) is an independent, nonprofit health policy and research organization based in Denver. It was established in 2002 by Caring for Colorado Foundation, The Colorado Trust and Rose Community Foundation. CHI's mission is to advance the overall health of the people of Colorado by serving as an independent and impartial source of reliable and relevant data for informed decision-making.