Delays in vaccinating our children in Colorado are putting the youngest and most vulnerable at increased risk of vaccine-preventable disease (VPD) and hospitalization resulting in excess morbidity, mortality and charges in the millions of dollars. Summarized below is our State of the Health of Colorado’s Children most recent analysis of the National Immunization Survey (NIS), Colorado Hospital Association (CHA) discharge data and Colorado Department of Public Health and Environment (CDPHE) data. The results emphasize the need for improved access and delivery systems and increased efforts to better educate young parents who are often swayed by the misinformation that permeates our social media, exaggerating risks of vaccines and promoting the unproven benefits of alternate vaccination schedules. Current Colorado data shows:

- Colorado ranks in the bottom half of US States in the composite 431331 NIS vaccination rate for its children with 20% under-immunized at 19-35 months (Figure 1).
- Individual on-time vaccination completion rates vary dramatically in young Colorado children, ranging from 10% to over 50% non-compliance in children 36 months of age or less for common vaccines (Measles-Mumps-Rubella, Varicella, DTaP, *Haemophilus influenzae* and Pneumococcus) implying voluntary or involuntary barriers to timely vaccination (Figure 2).
- The majority (65%) of Colorado children hospitalized with vaccine-preventable disease are four years of age or younger (Figure 3).
- Serious vaccine-preventable disease (including 4 deaths) affects hundreds (probably thousands) of Colorado children yearly (primarily the youngest) with avoidable public and societal costs amounting to tens of millions of dollars with hospitalization charges being just the tip of the iceberg (Table).
- All geographic regions of Colorado (RCCOs) are impacted by VPDs (Figure 4).

Over the past 10 years, Colorado has rarely exceeded an 80% early childhood vaccination rate with a commensurate predominance of vaccine-preventable diseases in very young children, highlighting the need for additional measures to improve access and delivery of vaccines to all Colorado children.
**ANNOUNCEMENT:**

REGISTRATION IS NOW OPEN!!

31st Annual Conference on Pediatric Infectious Diseases
July 28th – August 2, 2013
The Lodge at Vail – Vail, Colorado

*(See the link below to register for the conference and to download the conference brochure)*

www.childrenscolorado.org/events/31st-Ped-ID-Vail
For more information or registration questions, contact Kris Beam at 720-777-6671 or kris.beam@childrenscolorado.org

We are modifying our distribution process for Contagious Comments. If you wish to receive this publication please provide us with your E-mail address below.

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Please return your E-mail address to: Carolyn Brock Children’s Hospital Colorado, Epidemiology – Box B276, 13123 E. 16th Avenue, Aurora, CO 80045 or E-mail address: carolyn.brock@childrenscolorado.org. Thank you for your interest in our publication.

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**Table: Cases, rates, and charges for children in Colorado with vaccine-preventable diseases, 2011.**

<table>
<thead>
<tr>
<th>Vaccine-preventable Disease**</th>
<th>0-4 Years of Age</th>
<th>5-19 Years of Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CDPHE Reported cases</td>
<td>Hospitalizations (CHA)</td>
</tr>
<tr>
<td></td>
<td>Reported Cases</td>
<td>Case Rate per 100,000*</td>
</tr>
<tr>
<td>Pertussis</td>
<td>146</td>
<td>45.6</td>
</tr>
<tr>
<td>Pneumococcus (Invasive)</td>
<td>38</td>
<td>11.9</td>
</tr>
<tr>
<td>Influenza (Hospitalized)</td>
<td>206</td>
<td>64.4</td>
</tr>
<tr>
<td>H.influenzae (Invasive)</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Varicella</td>
<td>114</td>
<td>35.6</td>
</tr>
<tr>
<td>Total</td>
<td>509</td>
<td></td>
</tr>
</tbody>
</table>

* Population estimates for Colorado children for 2011 by age range were obtained from the Census Bureau using DataFerrett

** Four fatal cases in 2011

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**Figure 4: Colorado Children Hospitalized with Vaccine-preventable Diseases, 2010-11**

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VOLUME XXVIII NUMBER 2 SPECIAL EDITION April 2013