INTEROFFICE MEMORANDUM

DATE: February 16, 2011

TO: County Health Department Directors/Administrators

FROM: Shairi R. Turner, M.D., M.P.H.
Deputy Secretary for Health


FOR INFORMATION ONLY – Signature on file

In January 2011, the Bureau of Immunization (BOI) completed an annual immunization survey of 1,716 randomly selected two-year-old children born in Florida. The survey provides estimated immunization levels for 20 selected counties, as well as statewide results (see Enclosure 1).

Field staff conducted the survey with assistance from county health department (CHD) personnel, private physicians, and parents. Of the initial 1,980 survey participants, 1,716 remained after excluding for adoption, death, those whose parents refused to participate, and others who could not be located. For the first time, BOI used the Florida State Health Online Tracking System (Florida SHOTS) to calculate survey results. Key benefits of this automation include greater efficiency, improved data quality, rapid compilation and publishing of survey results, and report packaging.

The 2010 statewide coverage rate for the basic 4:3:1:3:3:1:4 series (four DTaP, three polio, one MMR, three Hib, three Hepatitis B, and one Varicella) series is 81.14%. Coverage levels for Florida’s 20 largest counties ranged from 63.16% to 92.0%. These rates reflect a slight drop from the 2009 survey’s statewide rate of 81.9%, ranging from 64.2% to 93.3%.

Data for the 4:3:1:3:3:1:4 series, which includes four doses of pneumococcal conjugate vaccine (PCV), is also provided. Please note that 80.7% of the children surveyed received four doses of PCV: A significant increase from 2009 (see Enclosure 3).

Through immunization, we prevent dangerous outbreaks, and help ensure a healthy future for our children. Florida’s childhood immunization service delivery is approximately two-thirds privatized, and continues to shift from the public sector (see Enclosures 2 and 4). If we are to achieve our state and national goal of 90% coverage levels for two-year-old children for the 4:3:1:3:3:1 series, we must focus our energy and resources on the following key areas:

- Identify and target interventions toward geographic areas with populations at high risk for under-immunization or “pockets of need” (see Enclosure 5);

- Continue to develop immunization linkage with the WIC program;
Conduct semi-annual audits, via the Florida SHOTS, to ensure complete immunization coverage of children whose immunization home is a CHD; and

Regularly schedule automated reminder and recall processes via the Florida SHOTS to improve overall compliance with the recommended immunization schedule, particularly for the fourth dose of DTaP and PCV vaccines.

Increase partnerships with managed care organizations and private healthcare providers to promote the Standards for Pediatric Immunization Practices, as well as the Florida SHOTS.

If you have questions or comments about the survey, or have found other successful methods to improve your community’s immunization levels, please contact us at (850) 245-4342. We are eager to share these best practices with other CHDs and private providers.

SRT/cha/aw
Enclosures

cc: Madelyn E. Butler, M.D., President
    Florida Medical Association
    Louis B. St. Petery, Jr., M.D., Executive Vice-President
    Florida Pediatric Society
    Tad P. Fisher, Executive Vice-President
    Florida Academy of Family Physicians
    Stephen R. Winn, Executive Director
    Florida Osteopathic Medical Association
    Kimberly A. Berfield
    Deputy Secretary
    Julia L. Gill, Ph.D., M.P.H., Director
    Division of Disease Control
    C. Meade Grigg, Director
    Office of Planning, Evaluation and Data Analysis
    Annette Phelps, A.R.N.P, M.S.N., Director
    Division of Family Health Services
    Phyllis J. Sloyer, R.N., Ph.D., Division Director
    CMS Network and Related Programs
    Shannon B. Lease, M.S., Director
    Office of Performance Improvement
    Charles H. Alexander, Chief
    Bureau of Immunization
    County Health Department Nursing Directors
    Bureau of Immunization Field Staff
# Department of Health

**Immunization Levels in Two-Year-Old Children**

**By Selected Counties and Statewide**

**Florida, 2010**

**Run Date: January 5, 2011**

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### 4:3:1:3:1:4

<table>
<thead>
<tr>
<th>County</th>
<th>Sample Size</th>
<th>Survey Participants</th>
<th>No Shots $^3$</th>
<th>Complete $^4$</th>
<th>Partial $^5$</th>
<th>Complete $^4$</th>
<th>Partial $^5$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Brevard</td>
<td>84</td>
<td>76</td>
<td>2</td>
<td>2.63% (± 3.6%)</td>
<td>62</td>
<td>81.58% (± 8.7%)</td>
<td>12</td>
</tr>
<tr>
<td>Broward</td>
<td>52</td>
<td>46</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>39</td>
<td>84.78% (± 10.4%)</td>
<td>7</td>
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<tr>
<td>Collier</td>
<td>87</td>
<td>75</td>
<td>1</td>
<td>1.33% (± 2.6%)</td>
<td>62</td>
<td>82.67% (± 8.6%)</td>
<td>12</td>
</tr>
<tr>
<td>Dade</td>
<td>62</td>
<td>50</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>46</td>
<td>92.00% (± 7.5%)</td>
<td>4</td>
</tr>
<tr>
<td>Duval</td>
<td>117</td>
<td>105</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>79</td>
<td>75.24% (± 8.3%)</td>
<td>26</td>
</tr>
<tr>
<td>Escambia</td>
<td>112</td>
<td>96</td>
<td>1</td>
<td>1.04% (± 2.0%)</td>
<td>71</td>
<td>73.96% (± 8.8%)</td>
<td>24</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>71</td>
<td>61</td>
<td>1</td>
<td>1.64% (± 3.2%)</td>
<td>48</td>
<td>78.69% (± 10.3%)</td>
<td>12</td>
</tr>
<tr>
<td>Lee</td>
<td>135</td>
<td>109</td>
<td>1</td>
<td>0.92% (± 1.8%)</td>
<td>91</td>
<td>83.49% (± 7.0%)</td>
<td>17</td>
</tr>
<tr>
<td>Leon</td>
<td>91</td>
<td>84</td>
<td>2</td>
<td>2.38% (± 3.3%)</td>
<td>70</td>
<td>83.33% (± 8.0%)</td>
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<tr>
<td>Manatee</td>
<td>104</td>
<td>88</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>76</td>
<td>86.36% (± 7.2%)</td>
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<td>Marion</td>
<td>85</td>
<td>74</td>
<td>1</td>
<td>1.35% (± 2.6%)</td>
<td>64</td>
<td>86.49% (± 7.8%)</td>
<td>9</td>
</tr>
<tr>
<td>Orange</td>
<td>141</td>
<td>117</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>89</td>
<td>76.07% (± 7.7%)</td>
<td>28</td>
</tr>
<tr>
<td>Osceola</td>
<td>112</td>
<td>95</td>
<td>2</td>
<td>2.11% (± 2.9%)</td>
<td>60</td>
<td>63.16% (± 9.7%)</td>
<td>33</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>109</td>
<td>95</td>
<td>2</td>
<td>2.11% (± 2.9%)</td>
<td>72</td>
<td>75.79% (± 8.6%)</td>
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<td>Pasco</td>
<td>66</td>
<td>58</td>
<td>1</td>
<td>1.72% (± 3.4%)</td>
<td>45</td>
<td>77.59% (± 10.7%)</td>
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<td>Pinellas</td>
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<td>74</td>
<td>2</td>
<td>2.70% (± 3.7%)</td>
<td>61</td>
<td>82.43% (± 8.7%)</td>
<td>11</td>
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<tr>
<td>Polk</td>
<td>103</td>
<td>98</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>70</td>
<td>71.43% (± 9.9%)</td>
<td>28</td>
</tr>
<tr>
<td>Sarasota</td>
<td>105</td>
<td>92</td>
<td>4</td>
<td>4.35% (± 4.2%)</td>
<td>74</td>
<td>80.43% (± 8.1%)</td>
<td>14</td>
</tr>
<tr>
<td>Seminole</td>
<td>90</td>
<td>74</td>
<td>1</td>
<td>1.35% (± 2.6%)</td>
<td>56</td>
<td>75.68% (± 9.8%)</td>
<td>17</td>
</tr>
<tr>
<td>Volusia</td>
<td>86</td>
<td>67</td>
<td>1</td>
<td>1.49% (± 2.9%)</td>
<td>53</td>
<td>79.10% (± 9.7%)</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>90</td>
<td>82</td>
<td>0</td>
<td>0.00% (± 0.0%)</td>
<td>66</td>
<td>80.49% (± 8.6%)</td>
<td>16</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td><strong>1,980</strong></td>
<td><strong>1,716</strong></td>
<td><strong>22</strong></td>
<td><strong>0.75% (± 0.2%)</strong></td>
<td><strong>1,354</strong></td>
<td><strong>81.14% (± 1.3%)</strong></td>
<td><strong>340</strong></td>
</tr>
</tbody>
</table>

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1. $4:3:1:3:1:4$ = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.
2. $4:3:1:3:1:4$ = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, one or more doses of Varicella, and four or more doses of Pneumococcal.

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2. Children have received all of the vaccines necessary to complete the measure and do not have a religious exemption.
3. Does not include 46 children that refused to participate, 215 children that could not be located, and 3 children deceased or deleted from the database.
4. Weighted average based on the number of births in each county.
5. Statewide Sample Size includes 3 deceased or deleted patients.
### Department of Health

**Immunization Levels in Two-Year-Old Children**

**By Vaccine Provider for 4:3:1:3:3:1**

**Florida, 2010**

**Run Date: January 5, 2011**

<table>
<thead>
<tr>
<th>Status</th>
<th>Survey Participants&lt;sup&gt;4&lt;/sup&gt;</th>
<th>% of Survey Participants</th>
<th>CHD&lt;sup&gt;2&lt;/sup&gt;</th>
<th>CHC&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Private Provider</th>
<th>No Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>#&lt;sup&gt;1&lt;/sup&gt;</td>
<td>%</td>
<td>#&lt;sup&gt;1&lt;/sup&gt;</td>
<td>%</td>
</tr>
<tr>
<td>Complete&lt;sup&gt;5&lt;/sup&gt;</td>
<td>1354</td>
<td>78.90%</td>
<td>166</td>
<td>79.81%</td>
<td>100</td>
<td>81.30%</td>
</tr>
<tr>
<td>Partial</td>
<td>340</td>
<td>19.81%</td>
<td>42</td>
<td>20.19%</td>
<td>23</td>
<td>18.70%</td>
</tr>
<tr>
<td>No Shots&lt;sup&gt;6&lt;/sup&gt;</td>
<td>22</td>
<td>1.28%</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Statewide Total</td>
<td>1,716</td>
<td>100.00%</td>
<td>208</td>
<td>100.00%</td>
<td>123</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<sup>1</sup> Children are grouped into the category that provided the majority of the vaccinations for the measure.

<sup>2</sup> County Health Department.

<sup>3</sup> Community Health Center.

<sup>4</sup> Does not include 46 children that refused to participate, 215 children that could not be located, and 3 children deceased or deleted from the database.

<sup>5</sup> Children that have received all of the vaccines necessary to complete the 4:3:1:3:3:1 measure and do not have a religious exemption.

<sup>6</sup> Includes 6 children with no vaccines for the 4:3:1:3:3:1 measure and 16 children with a religious exemption.

4:3:1:3:3:1 = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.
## Department of Health

### Immunization Levels in Two-Year-Old Children

**Historic Data 1990 - 2010 for 4:3:1:3:3:1**

**Florida, 2010**

Run Date: January 5, 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Survey Participants</th>
<th>Complete</th>
<th>Partial</th>
<th>No Shots</th>
<th>Private Provider</th>
<th>CHD</th>
<th>CHC</th>
<th>No Source</th>
<th>4+ DTaP</th>
<th>3+ Polio</th>
<th>MMR</th>
<th>3 Hib</th>
<th>3 Hep B</th>
<th>VZV</th>
<th>4 PCV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
<td>1,716</td>
<td>81.1</td>
<td>18.1</td>
<td>.7</td>
<td>65.8</td>
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<td>5.4</td>
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<td>88.0</td>
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<td>93.3</td>
<td>91.3</td>
<td>93.1</td>
<td>93</td>
<td>93.9</td>
</tr>
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<td>2009</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>N/A</td>
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<td>1,958</td>
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<td>0.6</td>
<td>60.1</td>
<td>15.8</td>
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<td>94.5</td>
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<td>2007</td>
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<td>15.7</td>
<td>1.1</td>
<td>68.3</td>
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<td>15.5</td>
<td>86.9</td>
<td>92.5</td>
<td>93.4</td>
<td>94.8</td>
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<td>2006</td>
<td>1,648</td>
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<td>20.2</td>
<td>0.6</td>
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<td>16.8</td>
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<td>0.1</td>
<td>87.4</td>
<td>93.2</td>
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<td>93.3</td>
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<td>93.7</td>
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<td>94.0</td>
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<td>3.6</td>
<td>80.2</td>
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<td>93.9</td>
<td>78.7</td>
<td>92.3</td>
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<td>93.7</td>
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<td>3.1</td>
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<td>42.7</td>
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<td>83.8</td>
<td>87.9</td>
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<td>72.1</td>
<td>61.2</td>
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<td>0.3</td>
<td>78.1</td>
<td>86.3</td>
<td>88.5</td>
<td>77.5</td>
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<td>N/A</td>
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<td>1993</td>
<td>591</td>
<td>73.3</td>
<td>26.2</td>
<td>0.5</td>
<td>52.9</td>
<td>46.9</td>
<td>N/A</td>
<td>0.2</td>
<td>75.5</td>
<td>80.0</td>
<td>88.5</td>
<td>91.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1992</td>
<td>549</td>
<td>67.4</td>
<td>31.0</td>
<td>1.6</td>
<td>52.8</td>
<td>45.9</td>
<td>N/A</td>
<td>1.3</td>
<td>69.0</td>
<td>77.0</td>
<td>89.3</td>
<td>83.9</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1991</td>
<td>497</td>
<td>63.2</td>
<td>35.6</td>
<td>1.2</td>
<td>57.5</td>
<td>40.6</td>
<td>N/A</td>
<td>0.6</td>
<td>65.4</td>
<td>75.4</td>
<td>86.2</td>
<td>55.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1990</td>
<td>532</td>
<td>66.0</td>
<td>32.7</td>
<td>1.3</td>
<td>54.5</td>
<td>44.2</td>
<td>N/A</td>
<td>1.3</td>
<td>75.9</td>
<td>82.0</td>
<td>89.7</td>
<td>59.2</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 Military totals for all years have been included in the Private Provider category.
2 Completion of 4:3:1:3:3:1 series at 24 months of age. 1990-2005 denotes the completion of 4:3:1 measure at 24 months of age. 4:3:1:3:3:1 = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.
3 Includes children with no vaccines for the measure and children with a religious exemption.
4 Only one dose of *Haemophilus Influenzae* type b vaccine (Hib) vaccine for years prior to 1994.
5 Excludes children that refused to participate, or could not be located, or were deceased or deleted from the database.
6 Complete and partial percentage weighted by the number of births in each strata.
7 2009 illustrates the 4:3:1:3:3:1 measure, excluding the Hib vaccinations (4:3:1:X:3:1). Completion percentage including the Hib vaccinations is 81.9%.
Department of Health
Immunization Levels in Two-Year-Olds
Percent Immunized by Specific Vaccine and Provider Type
Florida, 2010
Run Date: January 5, 2011

<table>
<thead>
<tr>
<th>Provider</th>
<th>Participants w/Shots</th>
<th>DTaP 1</th>
<th>DTaP 3</th>
<th>DTaP 4</th>
<th>Polio 1</th>
<th>Polio 3</th>
<th>MMR</th>
<th>Hib 3</th>
<th>Hep B 3</th>
<th>Varicella</th>
<th>PCV 1</th>
<th>PCV 2</th>
<th>PCV 3</th>
<th>PCV 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD ³</td>
<td>208</td>
<td>12.28%</td>
<td>216</td>
<td>201</td>
<td>234</td>
<td>217</td>
<td>226</td>
<td>244</td>
<td>220</td>
<td>225</td>
<td>238</td>
<td>217</td>
<td>216</td>
<td>208</td>
</tr>
<tr>
<td>Private Provider</td>
<td>1,042</td>
<td>61.51%</td>
<td>994</td>
<td>1003</td>
<td>910</td>
<td>989</td>
<td>957</td>
<td>954</td>
<td>936</td>
<td>923</td>
<td>975</td>
<td>993</td>
<td>1009</td>
<td>976</td>
</tr>
<tr>
<td>CHC ⁴</td>
<td>123</td>
<td>7.26%</td>
<td>129</td>
<td>114</td>
<td>103</td>
<td>128</td>
<td>116</td>
<td>113</td>
<td>104</td>
<td>116</td>
<td>113</td>
<td>128</td>
<td>122</td>
<td>113</td>
</tr>
<tr>
<td>Unknown</td>
<td>321</td>
<td>18.95%</td>
<td>352</td>
<td>327</td>
<td>218</td>
<td>352</td>
<td>303</td>
<td>266</td>
<td>284</td>
<td>317</td>
<td>266</td>
<td>339</td>
<td>309</td>
<td>305</td>
</tr>
<tr>
<td>Statewide Total</td>
<td>1,694</td>
<td>100.00%</td>
<td>1,691</td>
<td>1,645</td>
<td>1,465</td>
<td>1,686</td>
<td>1,602</td>
<td>1,577</td>
<td>1,544</td>
<td>1,581</td>
<td>1,592</td>
<td>1,677</td>
<td>1,656</td>
<td>1,602</td>
</tr>
</tbody>
</table>

¹ Does not include 46 children that refused to participate, 215 children that could not be located, and 3 children deceased or deleted from the database. Does not include 16 children with a religious exemption. Does not include 6 children with no vaccinations for the 4:3:1:3:3:1 measure.

² Children are grouped into the category that provided the majority of the vaccinations for the 4:3:1:3:3:1 measure. 4:3:1:3:3:1 = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.

³ County Health Department.

⁴ Community Health Center.
# Immunization Status in Two-Year-Old Children

By High-Risk Characteristics for 4:3:1:3:3:1

Florida, 2010

Run Date: January 5, 2011

<table>
<thead>
<tr>
<th>Mother's Education Level (Years)</th>
<th>Complete 1</th>
<th>Incomplete 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;12</td>
<td>223 (75.34%)</td>
<td>73 (24.66%)</td>
</tr>
<tr>
<td>12</td>
<td>428 (78.10%)</td>
<td>120 (21.90%)</td>
</tr>
<tr>
<td>&gt;12</td>
<td>623 (79.87%)</td>
<td>157 (20.13%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>80 (86.96%)</td>
<td>12 (13.04%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age of Mother</th>
<th>Complete 1</th>
<th>Incomplete 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>165 (78.57%)</td>
<td>45 (21.43%)</td>
</tr>
<tr>
<td>20 - 24</td>
<td>356 (76.89%)</td>
<td>107 (23.11%)</td>
</tr>
<tr>
<td>25 - 29</td>
<td>362 (78.52%)</td>
<td>99 (21.48%)</td>
</tr>
<tr>
<td>&gt;30+</td>
<td>465 (80.87%)</td>
<td>110 (19.13%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>6 (85.71%)</td>
<td>1 (14.29%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Siblings in Family</th>
<th>Complete 1</th>
<th>Incomplete 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3+</td>
<td>133 (74.72%)</td>
<td>45 (25.28%)</td>
</tr>
<tr>
<td>2</td>
<td>200 (73.26%)</td>
<td>73 (26.74%)</td>
</tr>
<tr>
<td>1</td>
<td>402 (77.16%)</td>
<td>119 (22.84%)</td>
</tr>
<tr>
<td>0</td>
<td>618 (83.40%)</td>
<td>123 (16.60%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (33.33%)</td>
<td>2 (66.67%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Complete 1</th>
<th>Incomplete 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>672 (78.69%)</td>
<td>182 (21.31%)</td>
</tr>
<tr>
<td>Yes</td>
<td>682 (79.12%)</td>
<td>180 (20.88%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trimester of Initiation of Prenatal Care</th>
<th>Complete 1</th>
<th>Incomplete 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd</td>
<td>70 (71.43%)</td>
<td>28 (28.57%)</td>
</tr>
<tr>
<td>2nd</td>
<td>274 (79.65%)</td>
<td>70 (20.35%)</td>
</tr>
<tr>
<td>1st</td>
<td>703 (80.25%)</td>
<td>173 (19.75%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>307 (77.14%)</td>
<td>91 (22.86%)</td>
</tr>
</tbody>
</table>

1 Completion of 4:3:1:3:3:1 consisting of Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.

2 Includes children with no shots and children with a religious exemption.
# Department of Health
## Immunization Levels in Two-Year-Old Children
### By Racial and Ethnic Groups
#### Florida, 2010
**Run Date: January 5, 2011**

<table>
<thead>
<tr>
<th>By Race</th>
<th>Sample Size</th>
<th>Survey Participants</th>
<th>No Shots 6</th>
<th>4:3:1:3:1 1</th>
<th>4:3:1:3:1:4 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Complete 4</td>
<td>Partial 5</td>
<td>Complete 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>#</td>
<td>% 6</td>
<td>#</td>
</tr>
<tr>
<td>Non-White</td>
<td>671</td>
<td>605</td>
<td>2</td>
<td>0.33% (± 0.5%)</td>
<td>477</td>
</tr>
<tr>
<td>White</td>
<td>1,306</td>
<td>1,111</td>
<td>20</td>
<td>1.80% (± 0.8%)</td>
<td>877</td>
</tr>
<tr>
<td>Statewide Total</td>
<td>1,980</td>
<td>1,716</td>
<td>22</td>
<td>1.28% (± 0.5%)</td>
<td>1,354</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>By Ethnicity</th>
<th>Sample Size</th>
<th>Survey Participants</th>
<th>No Shots 6</th>
<th>4:3:1:3:1 1</th>
<th>4:3:1:3:1:4 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Complete 4</td>
<td>Partial 5</td>
<td>Complete 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>#</td>
<td>% 6</td>
<td>#</td>
</tr>
<tr>
<td>Black</td>
<td>307</td>
<td>282</td>
<td>1</td>
<td>0.35% (± 0.7%)</td>
<td>220</td>
</tr>
<tr>
<td>Hispanic</td>
<td>549</td>
<td>471</td>
<td>2</td>
<td>0.42% (± 0.6%)</td>
<td>391</td>
</tr>
<tr>
<td>White</td>
<td>930</td>
<td>789</td>
<td>18</td>
<td>2.28% (± 1.0%)</td>
<td>609</td>
</tr>
<tr>
<td>Other</td>
<td>191</td>
<td>174</td>
<td>1</td>
<td>0.57% (± 1.1%)</td>
<td>134</td>
</tr>
<tr>
<td>Statewide Total</td>
<td>1,980</td>
<td>1,716</td>
<td>22</td>
<td>1.28% (± 0.5%)</td>
<td>1,354</td>
</tr>
</tbody>
</table>

1. 4:3:1:3:1 = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one or more doses of Varicella.
2. 4:3:1:3:1:4 = Four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, one or more doses of Varicella, and four or more doses of Pneumococcal.
4. Children have received all of the vaccines necessary to complete the measure and do not have a religious exemption.
5. Does not include 46 children that refused to participate, 215 children that could not be located, and 3 children deceased or deleted from the database.
6. ± 95% Confidence Level.
7. Statewide Sample Size includes 3 children deceased or deleted from the database and not included in the Sample Size Race or Ethnic Groups.