Assessing the Current State of Immunization Attitudes in the United States: Results From the 2011 ConsumerStyles Survey

Allison Kennedy, M.P.H., Kate LaVail, Ph.D., Michelle Basket, B.S., Glen Nowak, Ph.D.

Background & Objectives:
- Assessment of parents’ vaccine-related knowledge, attitudes, and behaviors (KAB) is an important step in effective vaccine communication
- Our objectives were to:
  - Describe the vaccine KABs of US parents in 2011
  - Examine the social context of vaccine decisions between parents and others in their social spheres

Methods:
- ConsumerStyles fielded in May of 2011
- Sent to a random sample of 14,598 Knowledge Networks online panels of age 18 and older
- Response rate was 56% (8,110/14,598)
- Data are weighted according to the 2010 Current Population Survey of the U.S. Census
  - Gender, age, household income, race/ethnicity, household size, education, census region, metro status, and prior Internet access

Analysis:
- Descriptive analysis of 2011 data
  - Looked at health information attitudes and behaviors, vaccine attitudes and behaviors, and specific vaccine questions and concerns
  - Restricted analysis to parents of at least one child age 6 years or younger

Results:

Response Rate:
- 2011 ConsumerStyles (14,598)
  - 8,110 respondents (56% response rate)
  - 3,062 parents of at least one child under 18 years of age
  - 956 parents of at least one child age 6 years or younger

Demographics:

<table>
<thead>
<tr>
<th>Respondent Age</th>
<th>2011 Weighted % (unweighted n=956)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34 years</td>
<td>60.0</td>
</tr>
<tr>
<td>35 years and older</td>
<td>40.1</td>
</tr>
<tr>
<td>Respondent Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>62.9</td>
</tr>
<tr>
<td>Black</td>
<td>10.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18.5</td>
</tr>
<tr>
<td>Other</td>
<td>8.3</td>
</tr>
<tr>
<td>Respondent Education Level</td>
<td></td>
</tr>
<tr>
<td>High school graduate or lower</td>
<td>35.0</td>
</tr>
<tr>
<td>Some college or higher</td>
<td>65.0</td>
</tr>
<tr>
<td>Respondent Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.0</td>
</tr>
<tr>
<td>Female</td>
<td>53.0</td>
</tr>
</tbody>
</table>

Which of the following best describes your plans for vaccinating your youngest child?
- My child has already received all of the recommended vaccines (6.0%)
- I intend to have my child receive all of the recommended vaccines as scheduled (12.6%)
- I intend to have my child receive all of the recommended vaccines but delay some (9.0%)
- I intend to have my child receive some but not all of the recommended vaccines (6.6%)
- I intend to have my child receive none of the recommended vaccines (2.7%)

Most parents were confident or very confident in:
- The safety of vaccines (72.2%)
- The effectiveness of vaccines (77.3%)
- The benefits of vaccines (76.9%)

Which of the following best describes how you think other parents act regarding childhood vaccines?
- They have their children get all of the recommended vaccines as scheduled (6.5%)
- They have their children get all of the recommended vaccines but they delay some (23.3%)
- They have their children get some but not all of the recommended vaccines (17.6%)
- They do not have their children get any of the recommended vaccines (0.5%)

What are the three most important sources of information that have helped you make decisions about your youngest child’s vaccinations?
- Child’s health care provider (66.6%)
- Family (45.3%)
- Child’s other parent (22.4%)
- American Academy of Pediatrics (18.2%)
- Internet (16.7%)
- CDC (15.3%)
- Traditional media, alternative health care provider, “other,” and “none of these” were less commonly cited sources

Top five questions parents typically ask their child’s health care provider before their child gets a vaccine:
- Which vaccines will my child get today? (75.0%)
- How many vaccines will my child get today? (66.7%) (51.3%)
- How likely is there to be a side effect? (57.3%)
- What are the side effects I should look for? (50.7%) (40.6%)
- What is normal to expect the day after? (46.5%)

Top five concerns parents typically have about childhood vaccines:
- I have no concerns about vaccines. (41.5%)
- My child getting too many vaccines in one doctor’s visit. (22.1%)
- Children get too many vaccines during the first two years of life. (21.8%)
- Vaccines may cause autism. (20.4%) (15.4%)
- Vaccine shots are painful for my child. (18.4%)

Conclusions:
- Most parents surveyed planned to vaccinate their child on time, as recommended.
- Most parents were confident in the safety, effectiveness, and benefits of vaccines.
- Many parents perceived that others were not following the recommended vaccination schedule.
- Further research should explore and address the reasons for the discrepancy between reported and perceived behavior regarding childhood vaccines.

Future Research with this Dataset:
- Stratified results from attitudinal questions based on vaccination behaviors.
- Analysis of perceived vaccination behaviors of others in participants’ social networks.
- Analysis of the role social relationships play in influencing vaccine attitudes.

Contact Information:
- Allison Kennedy: akennedy@cdc.gov
- Kate LaVail: klawail@cdc.gov
- Michelle Basket: apf2@cdc.gov
- Glen Nowak: gjn0@cdc.gov

© 2012, Centers for Disease Control and Prevention
- The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.