Vaccine knowledge, attitudes, and information-seeking behavior of parents of adolescents: United States, 2012

Allison Kennedy Fisher, MPH
Katherine LaVail, PhD

National Conference on Health Communication, Marketing, and Media
August 21, 2013
BACKGROUND AND OBJECTIVES
Background and Objectives

- Many parents are unaware of the recommendations for routine vaccination of adolescents.
- Parent awareness and support of these recommendations are essential in improving and maintaining vaccine uptake.
- The objective of this analysis was to describe the vaccine knowledge and attitudes of U.S. parents of adolescents in 2012.
METHODS
Survey Methods

• Series of online surveys administered through Knowledge Networks (KN)
  – Sampled from the KN probability-based panel of 50,000 US households
  – Offers internet access to panelists to avoid access bias

• SpringStyles fielded in March-April of 2012
  – Sent to a random sample of 11,636 KN online panelists age 18 and over
  – Response rate was 57.8% (6,728/11,636)

• SummerStyles fielded in June-July of 2012
  – Sent to a random sample of 6,402 SpringStyles respondents
  – Response rate was 65.1% (4,170/6,402)
Survey Analysis

• General descriptive analysis of 2012 data
  – Looked at knowledge, attitudes, and information-seeking behavior of parents of adolescents

• Data are weighted according to the 2012 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
RESULTS
Survey Respondents

2012 SummerStyles
4,170 respondents

1,418 parents of at least one child under 18 years of age

974 parents of at least one child age 11 to 17 years
Respondent Demographics

- The majority of respondents were:
  - Non-Hispanic white (62.5%)
  - Female (56.3%)
  - Age 30-44 (55.8%)

- Most respondents had one 11-17 year old adolescent in the household (66.0%), and reported that their youngest adolescent had visited a doctor since their 11th birthday (85.8%)
How knowledgeable are you about the following vaccines?

<table>
<thead>
<tr>
<th></th>
<th>Not at all %</th>
<th>A little %</th>
<th>Somewhat %</th>
<th>Pretty %</th>
<th>Very %</th>
</tr>
</thead>
<tbody>
<tr>
<td>MenACWY</td>
<td>42.9</td>
<td>21.6</td>
<td>21.9</td>
<td>10.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Tdap</td>
<td>15.2</td>
<td>22.8</td>
<td>32.5</td>
<td>21.8</td>
<td>7.6</td>
</tr>
<tr>
<td>HPV</td>
<td>24.9</td>
<td>23.1</td>
<td>30.2</td>
<td>15.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Flu</td>
<td>8.8</td>
<td>19.1</td>
<td>34.8</td>
<td>25.8</td>
<td>11.5</td>
</tr>
</tbody>
</table>
Which, if any of these vaccines are recommended for adolescents? (answered yes to each)

- Tetanus, diphtheria, acellular pertussis (Tdap): 51.7%
- Human papillomavirus (HPV): 47.3%
- Influenza (flu): 45.6%
- Meningococcal conjugate (MenACWY): 30.3%
- Don’t know: 28.7%
- Rotavirus: 9.8%*
- None of these: 3.7%*

*Incorrect answers
How much information have you looked for on the following vaccines?

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>None %</th>
<th>A little %</th>
<th>Some %</th>
<th>Pretty much %</th>
<th>A lot %</th>
</tr>
</thead>
<tbody>
<tr>
<td>MenACWY</td>
<td>64.3</td>
<td>16.1</td>
<td>15.0</td>
<td>3.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Tdap</td>
<td>54.5</td>
<td>19.1</td>
<td>17.4</td>
<td>7.0</td>
<td>2.0</td>
</tr>
<tr>
<td>HPV</td>
<td>48.0</td>
<td>19.3</td>
<td>21.7</td>
<td>6.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Flu</td>
<td>49.5</td>
<td>20.2</td>
<td>19.7</td>
<td>7.7</td>
<td>2.9</td>
</tr>
</tbody>
</table>
Which of these best describes the advice your youngest adolescent’s doctor gave you regarding the following vaccines?

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Strongly recommended against it</th>
<th>Recommended against it</th>
<th>Talked about it but did not offer a recommendation</th>
<th>Recommended it</th>
<th>Strongly recommended it</th>
<th>Did not discuss it*</th>
</tr>
</thead>
<tbody>
<tr>
<td>MenACWY</td>
<td>3.5</td>
<td>1.0</td>
<td>10.5</td>
<td>19.4</td>
<td>16.8</td>
<td>48.8</td>
</tr>
<tr>
<td>Tdap</td>
<td>3.4</td>
<td>0.6</td>
<td>8.0</td>
<td>25.8</td>
<td>29.3</td>
<td>32.9</td>
</tr>
<tr>
<td>HPV</td>
<td>3.0</td>
<td>1.9</td>
<td>13.6</td>
<td>24.4</td>
<td>15.3</td>
<td>41.8</td>
</tr>
<tr>
<td>Flu</td>
<td>3.9</td>
<td>2.5</td>
<td>12.4</td>
<td>28.8</td>
<td>21.1</td>
<td>31.3</td>
</tr>
</tbody>
</table>

*Note: This includes respondents who were not present at their child’s vaccination appointments.
How important do you think adolescent vaccines are for keeping children healthy?

- Not at all important: 3.2%
- A little important: 7.5%
- Somewhat important: 20.5%
- Important: 32.1%
- Very important: 36.8%
Please indicate how much you agree or disagree with the following statement: Getting my child immunized is the right thing to do.

- Strongly disagree: 6.0%
- Somewhat disagree: 4.2%
- Neither agree nor disagree: 17.5%
- Somewhat agree: 33.0%
- Strongly agree: 39.4%
Please indicate how much you agree or disagree with the following statement: It is important to vaccinate my child with adolescent vaccines in order to prevent the spread of disease in my community.

• Strongly disagree: 5.2%
• Somewhat disagree: 4.6%
• Neither agree nor disagree: 18.3%
• Somewhat agree: 35.3%
• Strongly agree: 36.6%
What questions regarding adolescent vaccines, if any, would you be interested in talking about with your child’s doctor? (1)

- Are there serious side effects: 51.4%
- Is it safe: 48.0%
- What are the long-term effects: 44.6%
- Does my child really need it: 38.9%
- Why does my child need this: 37.2%
- Why is this important: 34.3%
- How long will the protection last: 34.1%
- What will happen if my child doesn’t get it: 33.6%
What questions regarding adolescent vaccines, if any, would you be interested in talking about with your child’s doctor? (2)

- How well does this work: 31.6%
- Would you give this to your child: 31.6%
- I have no questions: 29.3%
- What’s the difference between the shots: 14.8%
- Can we wait until my child is older: 14.7%
- My child isn’t having sex, can we wait: 13.2%
- How many people have gotten this shot: 12.2%
- Does it really hurt more: 3.6%
- Other questions not listed: 3.3%
Which concerns, if any, do you have about adolescent vaccines in general? (1)

- I have no concerns about adolescent vaccines: 42.1%
- There isn’t enough information yet on long-term side effects: 33.2%
- Vaccines may cause serious side effects: 33.1%
- The ingredients in vaccines are unsafe: 18.0%
- Vaccines are not tested enough for safety: 18.0%
- Vaccines recommended for my adolescent are too new: 17.7%
- Vaccines are given to adolescents to prevent diseases they are not likely to get: 14.4%
Which concerns, if any, do you have about adolescent vaccines in general? (2)

- The protection provided by my adolescent’s recommended vaccines may wear off: 9.8%
- My adolescent getting too many vaccines in one doctor’s visit: 9.8%
- Vaccines are given to adolescents to prevent diseases that are not serious: 7.2%
- Vaccine shortages will prevent my adolescent from being vaccinated on time: 6.1%
- Vaccine shots are painful for my adolescent: 5.2%
- I have other concerns not listed here: 3.9%
SUMMARY AND CONCLUSIONS
Conclusions

- Most parents of adolescents in this survey reported positive attitudes toward adolescent vaccines
  - However, self-reported knowledge and information-seeking about these vaccines were both low
- Parents reported a number of questions and concerns about adolescent vaccines that they would like to discuss with their adolescent’s doctor
  - Note that many parents reported that they did not have any questions or concerns
Limitations

- Panel survey
- Social desirability bias
- Recall bias
Implications for Practice

- Healthcare and public health professionals should work with parents of adolescents to raise awareness of adolescent vaccines, including offering a strong recommendation.
- Parents’ questions and concerns should be proactively addressed.
- Educational materials for parents and healthcare professionals can help foster these discussions.
Thank You

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov  Web: http://www.cdc.gov

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.