Perinatal Hepatitis B in Texas

Rachel Wiseman, MPH
Overview

- CDC Estimates
- PHBPP Demographics
- PHBPP Performance Measures

NOTE:
All 2017 data is provisional. Babies born in 2017 may not be old enough to have completed the series or be tested for infection/immunity.

Data for San Antonio and Houston is not included in any of the data presented.
## CDC Estimates of Births to Hepatitis B-infected Women

### Source of HBsAg prevalence estimates:
- National Health and Nutrition Examination Survey 2009-2014
- 2009-2014 Annual Reports

<table>
<thead>
<tr>
<th>Maternal Residence</th>
<th>Births</th>
<th>United States-Born(^1)</th>
<th>Total Births</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White, Non-Black, Non-Hispanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Texas</td>
<td>All Births</td>
<td>118,747</td>
<td>30,330</td>
</tr>
<tr>
<td>Texas</td>
<td>HBsAg Births</td>
<td>202</td>
<td>194</td>
</tr>
<tr>
<td>Houston</td>
<td>All Births</td>
<td>8,161</td>
<td>9,429</td>
</tr>
<tr>
<td>Houston</td>
<td>HBsAg Births</td>
<td>14</td>
<td>60</td>
</tr>
<tr>
<td>San Antonio</td>
<td>All Births</td>
<td>4,789</td>
<td>1,371</td>
</tr>
<tr>
<td>San Antonio</td>
<td>HBsAg Births</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
CDC Estimates & Texas PHBPP

**CDC**
- Point: 1194
- Low: 882

**Texas**
- 2015: 648 (54%)
- 2016: 654 (55%)
Questions We Need to Answer

- Who are these missing moms?
- Where are these missing moms?
- How do we find them or get them reported to us?

1194 Moms
Drilling Down the Estimate

<table>
<thead>
<tr>
<th>2015</th>
<th>East Asia</th>
<th>Africa</th>
<th>Southeast Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC</td>
<td>237</td>
<td>186</td>
<td>167</td>
</tr>
<tr>
<td>TX</td>
<td>88</td>
<td>131</td>
<td>206</td>
</tr>
</tbody>
</table>

**East Asia**: China, Hong Kong, Japan, North Korea, South Korea, Macau, Mongolia, Taiwan, Southern Ryukyu Islands

**Southeast Asia**: Burma, Brunei, Cambodia, Indonesia, Laos, Malaysia, Paracel Islands, Spratly Islands, Papua New Guinea, Timor, Philippines, Singapore, Thailand, East Timor, Vietnam
## Maternal Country of Birth, Texas PHBPP, 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Moms (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIETNAM</td>
<td>129 (18%)</td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>101 (14%)</td>
</tr>
<tr>
<td>USA</td>
<td>79 (11%)</td>
</tr>
<tr>
<td>CHINA</td>
<td>74 (10%)</td>
</tr>
<tr>
<td>NIGERIA</td>
<td>68 (9%)</td>
</tr>
<tr>
<td>BURMA</td>
<td>24 (3%)</td>
</tr>
<tr>
<td>CONGO</td>
<td>24 (3%)</td>
</tr>
<tr>
<td>INDIA</td>
<td>18 (3%)</td>
</tr>
<tr>
<td>TAIWAN</td>
<td>14 (2%)</td>
</tr>
<tr>
<td>MEXICO</td>
<td>12 (2%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>716</strong></td>
</tr>
</tbody>
</table>

An additional 57 countries are represented in the 2016 enrollment.
Infants Born to Foreign-Born and US-Born Moms, 2015

![Bar chart showing the comparison between the number of infants born to US-born and foreign-born mothers as estimated by CDC and reported by PHBPP.](chart.png)
Maternal Age, Texas PHBPP, 2016-17*  

*Data is provisional as of 5/1/18
Infants Born to HBV-infected Moms, Texas PHBPP, 2013-17*

*Data is provisional as of 5/1/18
Perinatal Infection in Infants, Texas, 2003-18*

*Data is provisional as of 5/1/18
Infants with Birth Dose/HBIG within 1 Day of Birth, 2013-17*

*Data is provisional as of 5/1/18

2015 National Average= 96%
Infants with Birth Dose/HBIG within 1 Day of Birth by PHR, 2016

2016 Texas Average = 98%

- PHR 1: 100.0%
- PHR 2/3: 98.3%
- PHR 4/5M: 100.0%
- PHR 6/5S: 98.5%
- PHR 7: 98.5%
- PHR 8: 100.0%
- PHR 9/10: 94.0%
- PHR 11: 93.0%
Infants that Completed the Series, 2013-17*

*Data is provisional as of 5/1/18

2015 National Average = 77%
Infants that Completed the Series by PHR, 2016

<table>
<thead>
<tr>
<th>PHR 1</th>
<th>PHR 2/3</th>
<th>PHR 4/5N</th>
<th>PHR 6/5S</th>
<th>PHR 7</th>
<th>PHR 8</th>
<th>PHR 9/10</th>
<th>PHR 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.5%</td>
<td>89.8%</td>
<td>77.8%</td>
<td>80.5%</td>
<td>94.0%</td>
<td>100.0%</td>
<td>76.5%</td>
<td>85.7%</td>
</tr>
</tbody>
</table>

2016 Texas Average = 87.5%
Infants with Post-Vaccine Serological Testing, 2013-17*

% of Infant Cases

- 2013: 54.5%
- 2014: 57.6%
- 2015: 55.8%
- 2016: 60.5%
- 2017*: 30.2%

2015 National Average= 72%

*Data is provisional as of 5/1/18
Infants with Post-Vaccine Serological Testing by PHR, 2016

- PHR 1: 80.0%
- PHR 2/3: 69.7%
- PHR 4/5N: 50.0%
- PHR 6/5S: 63.5%
- PHR 7: 69.5%
- PHR 8: 100.0%
- PHR 9/10: 55.0%
- PHR 11: 53.0%

2016 Texas Average = 60.5%
Summary

Areas for improvement
• Identifying all pregnant women with hepatitis B infection
• Ensuring PHBPP infants are tested for immunity and infection after vaccination

Areas of success
• Vaccination of all infants at birth
• Prophylaxing exposed infants with HBV/HBIG at birth
• Completing the 3-dose HBV series
Thank you!

Questions?