Update on Mumps, Pertussis, and Hepatitis A
Morbidity
Los Angeles County

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Immunization Coalition Meeting
October 12, 2017
What we will be covering today

I. Overview of Vaccine Preventable Disease (VPD) Morbidity in Los Angeles County (LAC)

II. Update on the LAC mumps outbreak among men who have sex with men (MSM)

III. Anticipating the next pertussis epidemic in LAC

IV. Hepatitis A outbreak
Vaccine-Preventable Diseases Reported in Los Angeles County (Confirmed and Probable)

<table>
<thead>
<tr>
<th>Disease</th>
<th>2016</th>
<th>2015</th>
<th>5-year Average (2011-2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Haemophilus influenzae</em> Type B (&lt;5 years of age)</td>
<td>0</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Measles</td>
<td>18</td>
<td>28</td>
<td>11.6</td>
</tr>
<tr>
<td>Mumps</td>
<td>18</td>
<td>14</td>
<td>9.8</td>
</tr>
<tr>
<td>Pertussis</td>
<td>216</td>
<td>859</td>
<td>664</td>
</tr>
<tr>
<td>Polio (paralytic)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rubella</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td>Congenital Rubella</td>
<td>1</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td>Tetanus</td>
<td>0</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Varicella, Hospitalized</td>
<td>12</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Varicella, Fatal</td>
<td>0</td>
<td>0</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Mumps outbreaks in LAC and U.S.
LAC MSM Mumps Outbreak

• As of October 11, 2017
  – Total number of cases: 55
    • First case reported on January 10, 2017
    • 50 reside in LAC
    • 44 are MSM
      – 20% are HIV positive
    • 41 of the cases frequented:
      – Bars, clubs, and gyms
      – In the Downtown LA, West and East Hollywood areas
    • Only 2 cases produced proof of immunity
Other Mumps Outbreaks in the U.S.

• Arkansas Mumps Outbreak
  – Total number of cases: 2,954 (August 2016 – August 2017)
  – Second largest mumps outbreak in the U.S. in the last 30 years
  – Declared over September 8, 2017

• North Carolina Mumps Outbreak
  – Total number of cases: 8 (as of August 31, 2017)
  – Majority are MSM and persons living with HIV

• Hawaii Mumps Outbreak
  – Total number of cases: 452 (as of October 5, 2017)
  – Two clusters reported (total of 9 cases) beginning in March 2017
Anticipating the next pertussis epidemic in LAC
## LAC Pertussis Epidemics: 2010 and 2014

<table>
<thead>
<tr>
<th></th>
<th>Number of Cases</th>
<th>Incidence Rate (per 100,000 population)</th>
<th>Cases per day</th>
<th>Percentage of Adults/Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010 Epidemic</strong></td>
<td>972</td>
<td>9.91</td>
<td>2.66</td>
<td>40.1%</td>
</tr>
<tr>
<td><strong>2014 Epidemic</strong></td>
<td>1,558</td>
<td>16.48</td>
<td>4.27</td>
<td>53.4%</td>
</tr>
<tr>
<td><strong>2018 Epidemic</strong></td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
Hepatitis A Outbreaks in San Diego, Santa Cruz, and LA Counties
San Diego hepatitis A outbreak

• First case on November 24, 2016
• As of October 10, 2017
  – 490 cases
  – 342 (70%) hospitalizations
  – 18 (3.7%) deaths
• 80% of patients are homeless and/or used illicit drugs (as of September 19, 2017)
San Diego hepatitis A outbreak

- Small groups of cases have taken place in people who:
  - Used the same homeless service providers
  - In facilities with shared restrooms
    - Jails
    - Residential drug treatment facilities
    - Single room occupancy hotels
    - Assisted living facilities
- There have also been cases among volunteers at homeless shelters, sanitation workers, healthcare workers, and a parole officer
Santa Cruz hepatitis A Outbreak

• From April 1, 2017 to October 5, 2017
  – 73 cases
  – 33 (45%) hospitalizations
  – 1 (1.4%) death

• 80% of patients are homeless and/or used illicit drugs
LA County hepatitis A outbreak

• Outbreak declared in LA County on September 19, 2017
• There have been 12 confirmed cases as of October 9, 2017
• Majority of cases are homeless and/or drug users (injection and non-injection) – as of September 22, 2017
• Other cases are among people who provide services to the homeless

• Visit http://publichealth.lacounty.gov/media/hepa/index.htm for updated information
What is Public Health doing to address the outbreak in LA?

• Working to prevent the spread in local communities by:
  – Investigating all hepatitis A cases and recommending preventive treatment for all close contacts
  – Providing hepatitis A vaccinations for homeless people
  – Conducting health education and promoting vaccination and improved hygiene (cleanliness)
Questions

Main Line: 213-351-7800