Salmonella Paratyphi B: A Local Perspective

James Matthews, Epidemiologist
Maricopa County, Arizona

- Population: Over 4 million*
  - Roughly 2/3 population of Arizona
  - 4th most populous county in United States
- Salmonella cases investigated per year: 462**
- ~ 21 PulseNet clusters per year ***

* 2014 estimate (http://quickfacts.census.gov/qfd/states/04/04013.html)
** 5-year average 2010-2014; confirmed and probable cases only
***5-year average 2010-2014
### Descriptive Statistics

<table>
<thead>
<tr>
<th>Lab-Confirmed Cases</th>
<th>N = 12</th>
</tr>
</thead>
</table>
| **Serotypes/PFGEs** | *Salmonella* Paratyphi B, JKXX01.1495 (11)  
*Salmonella* Weltevreden, JQPX01.0371 (1) |
| **Sex**             | 66% female |
| **Age Range**       | <1 year - 58 years  
*Median: 28.5 years* |
| **Hospitalized**    | 3 (25%) |

#### Environmental Services Sampling

<table>
<thead>
<tr>
<th>Collection Date</th>
<th>Sample Location</th>
<th>Result</th>
<th>Result Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/6/2015</td>
<td>Distributor X</td>
<td>Negative</td>
<td>5/11/2015</td>
</tr>
<tr>
<td>5/14/2015</td>
<td>Restaurant C</td>
<td>Positive for <em>Salmonella Newport</em></td>
<td>5/19/2015</td>
</tr>
<tr>
<td>5/20/2015</td>
<td>Distributor X</td>
<td>Positive for <em>Salmonella Weltevreden</em></td>
<td>5/26/2015</td>
</tr>
</tbody>
</table>
Lessons Learned

- Think outside the PFGE pattern
- Consider the complexity of distribution chains
- Flexibility and communication were key
Acknowledgements

- Maricopa County Department of Public Health
  - Nicole LaMantia LPN
  - Jigna Narang MPH
  - Karen Zabel MSN, RN
  - Karen Rose BSN, RN
  - Tracey Lussier
  - Jennifer Adair RN
  - Tammy Kafenbaum RN
  - Robert Walsh
  - Yakoot Begum
  - Dolores Ravsten
  - Alice Carrigan MS, RN
  - Helen Houser RN
  - Ronald Klein RN
  - Tammy Sylvester MSN, RN
  - Rebecca Sunenshine MD

- Maricopa County Environmental Services Department
  - Paolo Lumadao MPH, RS
  - Scott Zusy MS, RS
  - Katherine Londen RS

- Arizona State Public Health Laboratory
- Arizona Department of Health Services
- CDC and FDA
QUESTIONS?