2017 Measles Outbreak
2017 Measles Outbreak

- First case confirmed April 11 in an unvaccinated 20-month-old with no travel history
- 79 cases statewide
- 90% of cases unvaccinated, 81% within the Somali MN Community
- 22 cases were hospitalized
- Close to 9,000 people exposed

<table>
<thead>
<tr>
<th>MMR status:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvaccinated:</td>
<td>71</td>
</tr>
<tr>
<td>1 MMR:</td>
<td>3</td>
</tr>
<tr>
<td>2 MMR:</td>
<td>3</td>
</tr>
<tr>
<td>Unknown:</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Somali Minnesotan:</td>
<td>64</td>
</tr>
<tr>
<td>White/Hispanic:</td>
<td>3</td>
</tr>
<tr>
<td>White/NonHispanic:</td>
<td>11</td>
</tr>
<tr>
<td>Black/NonHispanic:</td>
<td>1</td>
</tr>
<tr>
<td>Unk/pending:</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>2 years</td>
</tr>
<tr>
<td>Range</td>
<td>3 months-57 years</td>
</tr>
<tr>
<td>Children (0-10 years)</td>
<td>73 (92% of cases)</td>
</tr>
<tr>
<td>&lt; 12 months</td>
<td>6</td>
</tr>
<tr>
<td>1-4 years</td>
<td>54</td>
</tr>
<tr>
<td>5-10 years</td>
<td>13</td>
</tr>
<tr>
<td>Adolescents (11-17 years)</td>
<td>1</td>
</tr>
<tr>
<td>Adults (18+ years)</td>
<td>5</td>
</tr>
</tbody>
</table>
Timeline of case identification

Measles Cases in Minnesota, March 30-July 6 2017 (n=78)
Measles Cases: Exposure sites and counties affected

Measles cases by likely exposure site, July 25 (N=79)

- Childcare, 33, 42%
- Household, 27, 34%
- Healthcare, 3, 4%
- Community, 11, 14%
- School, 4, 5%
- Unknown, 1, 1%
Public Health Response

- Laboratory confirmation of measles diagnosis
- Identify exposed contacts
  - Sharing airspace
- Assess immunity of exposed contacts
  - Not immunized or never had measles disease
- Administer post-exposure prophylaxis to exposed, susceptible contacts
  - MMR within 72 hours or IG within 6 days of exposure
  - Priority high-risk contacts
- If too late to administer prophylaxis, exclusion and monitoring of exposed susceptible contacts
Coordinated Public Health Response

• State & County Health Department collaboration
• Incident Command
• Daily Command Briefings
• Staff-to-staff communication on daily work
• Coordination with healthcare through Hospital Compact
Exposures and Exclusions

- Total health care and child care exposures: 8,800
- Schools involved : 4
- Child care centers involved : 12
- Total exclusions associated with this outbreak: 596
  - Excluded from health care: 66
  - Excluded from school/child care: 530
- No legal action necessary
It's Complicated!
Human Services: Essential Services
Community Outreach

Face-to-face, one-on-one

“About immunization...not immigration”

Media attention
Vaccine Uptake

- Total Doses
- % Somali

Number of Doses

Week Beginning

Percent to Somali Residents


0% 2% 4% 6% 8% 10% 12%
Measles cases over time, 1989-1990 vs 2017
Cost of Not Vaccinating

- Public Health Costs: Hennepin County: >$397,000
- MDH ~$1mil.
- Local activities funded by Property Tax/Local Public Health dollars
- Other costs to healthcare, schools, daycares, and missed work time for parents
Susan Palchick

Susan.Palchick@Hennepin.us
Measles 2017: The Rural Response

Cindy Shaughnessy, Director
Le Sueur County Public Health
Le Sueur County: Who Are We?

**Population**: 27,591

**Race**
- White: 96.9%
- Black/Afr. Am.: 0.7%
- Asian: 0.7%
- Am. Indian/Alaskan: 0.5%
- Two or more races: 1.2%

**Hispanic/Latino**: 5.7%

**Persons in Poverty**: 8.5%

**Median Household Income**: $60,632
Population of Counties with Measles Cases

U.S. Census 2016 Estimates

- Hennepin County: 1,232,483
- Ramsey County: 540,649
- Crow Wing County: 63,940
- Le Sueur County: 27,591
A Closer Look.....

% Non-medical exemption to all vaccines
2015-2016 (Kindergartners)

Statewide 1.73%
Le Sueur County 1.20%
School A 0%
School B 0%
School C 1.92%
School D 6.45%

2 cases = 100+ hours Public Health Staff Time = $6,893
*This does not include the time our partners spent helping us with the response
The Timeline

05-01-17 Notification: 3 children possibly exposed
05-03-17 Exposure case (Crow Wing) confirmed positive
05-10-17 2 of the children are symptomatic. Testing done.
05-11-17 Conference Call with:

- Eric Weller, SC Healthcare Coalition, RHPC Administrator
- Kevin Burns, SC Healthcare Coalition, PIO
- Ryan Swafford, MDH Regional Epidemiologist & SC Healthcare Coalition
- Amy Smith, MDH PHPC & SC Healthcare Coalition
- Ann Traxler, Emergency Management Director
- Tammy Stewig, Deputy Emergency Management
- Pam Voit, Assistant Emergency Management & Public Health Accountant
- Kally Remiger, School Nurse
- Darlene Tuma, Public Health Supervisor
- Elisa O’Malley, Public Health Supervisor
- Cindy Shaughnessy, Public Health Director
- Megan Kirby, PHEP Coordinator

05-15-17 PH Notified that lab results were POSITIVE!
It’s all about partnerships!

- Mankato Clinic
- Family
- South Central Healthcare Coalition
- School Nurses & Superintendents
- MDH Regional Epidemiologist
- Emergency Management
- MDH Regional PHPC Consultant
- Confirmed positive
  *Above Partners notified*
- County Commissioners & Administration
  Public Health Staff
  County Employees
- Area Hospitals
  Area Clinics
  School Superintendents
  School Nurses
- Le Sueur County Area Media Outlets
  Mankato Media Outlets
What Went Well?

- **Good working relationships** with partners
- **Strong**, involved & responsive SC Healthcare Coalition
- **Collaboration** in message development
- **MDH** morning conference calls with LPH
- **MDH responsiveness** to what rural MN needed
  - Added conference call specific for Coalitions
  - Added Le Sueur area rural hospital & clinic contacts for “Infection Preventionist” conference calls
- **Clear, consistent messages** released
- **Social Media for rumor control** – used EM Facebook page
Lessons Learned

• **Resources expand** using Healthcare Coalition
• **Update** contact lists regularly and often
• **Be prepared** – have the messaging ready to go
• **Use** the skills learned from PHEP
• **Enhance** the MDH EP and DP&C interface
• **Continue** Risk Communication training
• **Launch** the Public Health Facebook page

Accomplished  September 2017!!
Contact information

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phone 507-357-8246
webpage: www.co.le-sueur.mn.us

Le Sueur County Public Health
2017 MEASLES OUTBREAK RESPONSE
KANDIYOHI COUNTY HEALTH AND HUMAN SERVICES
Kandiyohi County

2016
Population: 42,495
Demographics:
- White alone (non-Hispanic) 81.6%
- Hispanic or Latino 12.1%
- Black/African American 5.1%
April 27: Message to Media

Measles outbreak prompts vaccination message

Officials urge parents to check status of immunizations

By Anne Polta
apolta@wctv.com
Outreach to Area Providers and to Community

• Local response
  – Utilizing MIIC reports, we identified those children 12-16 months old in our county that had no record of receiving a MMR. Area clinics were given those initial lists to begin outreach.
  – Collaborated with Southern Prairie Community Care and utilized their Somali Liaison to assist with outreach calls.

• Regional MIIC Response
  – All clinics received No MMR lists for 12-48 month old children and overall MMR rates for children 1 to 18 years.
Jadeecada

Sarampión

Measles

Kandy County
Health and Human Services
http://www.co.kandy.sri.lanka
JADEECADA

1. Sug calaamadan jadeecada

2. Wac bakaarkaaga ama rugta caalmaadka ilaa mar kita farsamada. Min kasta dadka aad ku jirto xumarka. Muujiiroo rugta gaarroo xumarka oo mar kita isku li油气 illaa aad disheekto la hadlayaa. 
Haalkaaga ama rugta caalmaadka aqooy ku sheegto, doona haddii aad u ilaal karto.

Waa maxay calaamadaha jadeecadu?
- Fiihiric IYO
- Qandho IYO
- Qulac AMA sanka oo duul ku dareebo AMA indhaa oo ilmeeya/cuncuna

Intee in leeg ayuu qofka qaba jadeecada wax caadisin karaa?
- Qofka qaba jadeecada wuxuu u guudin kara dalka kala lahaa aad maalinuuhu kolkha finaanka soo bixiso; aqoone Iyo afar maalinuuhu kaddib.

Maxaan sammeeyaa??

Qof walba u hella tallaabo si ay u ilbalaytan ku dhanka ah jadeecada.
Tallaalka Jadeecada waa amman ah oo wax ku oo ah.

Siday ku fidaa jadeecadu?
Jadeecadu waxay nooc oo karta oo halas ah oo keena in ilaal xadan oo jihfado ama xitaa qabtaa wanaagsan.
Increase in 1 MMR Coverage by Birth Year
May to November, 2017

<table>
<thead>
<tr>
<th>Birth Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>5 to 6 yo</td>
<td>4 to 5 yo</td>
<td>3 to 4 yo</td>
<td>2 to 3 yo</td>
<td>Under 2 yo</td>
</tr>
<tr>
<td>Kandiyohi</td>
<td>0.5%</td>
<td>1.8%</td>
<td>2.2%</td>
<td>3.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>SW Region</td>
<td>0.4%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.6%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>
Commissioner Linda Higgins
MINNESOTA COMMUNITY HEALTH BOARD FUNDING, 2016

State Funds: 15%
(6% Local Public Health Grant)

Locally-Generated Funds: 47%
(32% local levies)

Federal Funds: 38%

Questions?