Improving & Sustaining Immunization Coverage of Kindergarten Age Children

Dr. Meena Dawar

30 Jan 2018
Outline

• Background – Regional Immunization Committee
• Strategies to improve coverage
• Results
• Conclusion
Our story

• Evolution from four distinct health departments to a health authority

• Creation of Regional Immunization Committee in Fall 2011
  – Standardize practice in all areas
  – Support launch of new programs
    • Rotavirus
    • Varicella dose 2 at K entry (Increase in routine imms at K entry from one shot to two)
  – Improve K coverage
K DaPTP Coverage in fall 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Vancouver</th>
<th>Richmond</th>
<th>Coastal Urban</th>
<th>Coastal Rural</th>
<th>Vancouver Coastal Health</th>
<th>British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83.5%</td>
<td>92.3%</td>
<td>82.9%</td>
<td>79.5%</td>
<td>82.9%</td>
<td>79.5%</td>
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<tr>
<td></td>
<td>82.5%</td>
<td>86.2%</td>
<td>80.2%</td>
<td>79.0%</td>
<td>80.2%</td>
<td>79.0%</td>
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<tr>
<td></td>
<td>82.3%</td>
<td>89.1%</td>
<td>69.8%</td>
<td>85.1%</td>
<td>81.2%</td>
<td>77.0%</td>
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<tr>
<td></td>
<td>82.3%</td>
<td>91.7%</td>
<td>54.8%</td>
<td>80.1%</td>
<td>78.2%</td>
<td>76.0%</td>
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</tbody>
</table>
# K 2-Dose MMR Coverage in Fall 2011

<table>
<thead>
<tr>
<th></th>
<th>Vancouver</th>
<th>Richmond</th>
<th>Coastal Urban</th>
<th>Coastal Rural</th>
<th>Vancouver Coastal Health</th>
<th>British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>90.1%</td>
<td>93.8%</td>
<td></td>
<td></td>
<td>88.6%</td>
<td>87.1%</td>
</tr>
<tr>
<td>2008-2009</td>
<td>89.5%</td>
<td>91.2%</td>
<td></td>
<td></td>
<td>87.6%</td>
<td>87.8%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>89.2%</td>
<td>93.5%</td>
<td>82.1%</td>
<td>89.0%</td>
<td>88.5%</td>
<td>88.6%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>89.6%</td>
<td>95.7%</td>
<td>75.0%</td>
<td>87.1%</td>
<td>87.5%</td>
<td>87.6%</td>
</tr>
</tbody>
</table>
Kindergarten Entry
A Key Immunization and Health Promotion Opportunity

• First opportunity to interact with ALL children within our health authority

• Review immunization history
  • offer completion of incomplete series

• Provide routine vaccines for age: DaPTP and V
  • Boost protection from infant vaccines to protect through early school years
## Activities to Improve Coverage

### Promotion
- Communications plan: Community champions, K imms webpages, posters, brochures, Media ++++, social media, physicians updates

### Surveillance
- Annual coverage analysis, transitioned to new Public Health Surveillance Unit
  - Coverage for each school – mid year and end year
  - School level data posted publicly

### Activities in our geographic administrative areas

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<thead>
<tr>
<th></th>
<th>CR</th>
<th>CU</th>
<th>R</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reminders to families</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone calls</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Immunization notices</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Immunization Clinics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Booked appointments</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>during the day</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Drop-in</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Evening</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Weekend</td>
<td>K fair</td>
<td>✓</td>
<td>✓</td>
<td>✓ (summer)</td>
</tr>
<tr>
<td>In school – no parents</td>
<td>Pilot 14-15</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>In school – with parents</td>
<td>✓</td>
<td></td>
<td></td>
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</table>
National Targets are aimed at age 7, message for K boosters: ages 4-6 years. This is inconsistent with program delivery in K.

Protect your child before starting kindergarten - Get their K-entry vaccines

Children need booster vaccines starting at age 4 – before they go to kindergarten.

Protect them against Tetanus, Diphtheria, Pertussis (whooping cough), Polio & Chicken Pox.

Call your local health centre to book an appointment today.

North & West Vancouver 604.983.6700
Gibsons 604.886.5600
Bella Bella 250.957.2308 ext 229

Squamish 604.892.2293 OR 1.877.892.2239
Whistler 604.932.3202
Pemberton 604.894.6939
Sechelt 604.883.5164
Pender Harbor 604.883.2764
Powell River 604.485.3310

Is Your Child Starting Kindergarten?
ARE YOUR CHILD’S IMMUNIZATIONS UP TO DATE?

READ AND LEARN ABOUT:
- Kindergarten booster vaccines starting at age 4
- Where to get immunized for Kindergarten
- Why immunization records are important
- Who to call for questions
Community Champions

Hi. I’m Andrew. I need your help.

I’m 15 years old and have survived cancer, had a heart transplant and have a rare autoimmune disease. My medication makes me susceptible to complications, even death, if I’m around people with illnesses like measles & whooping cough.

Please have your child immunized – it protects your child, and people like me.

PARENTS: Just two free vaccines protect your child against whooping cough, polio, measles, mumps, rubella, chicken pox, tetanus, and diphtheria.

Recommended for children starting at age 4 – before entering kindergarten in the fall.

Book an appointment at your nearest community health centre.

www.vch.ca/kindergarten-vaccines

10 days in the ICU. He almost died.

Yet it was preventable.

While having chemotherapy for leukemia, Beckett (at right) got chicken pox from an unvaccinated child at school.

Getting vaccinated protects you & everyone around you. Boost your child’s protection against whooping cough, chicken pox, tetanus, diphtheria & polio. Recommended for children starting at age 4 – before they go to kindergarten.

Book an appointment today at your local health centre.

<table>
<thead>
<tr>
<th>Evergreen</th>
<th>Robert &amp; Lily Lee Family</th>
<th>Three Bridges</th>
</tr>
</thead>
<tbody>
<tr>
<td>3425 Crowley Dr</td>
<td>1589 E Broadway</td>
<td>1290 Hornby St</td>
</tr>
<tr>
<td>604.872.2511</td>
<td>604.675.3980</td>
<td>604.736.9844</td>
</tr>
<tr>
<td>Pacific Spirit</td>
<td>South</td>
<td>Richmond</td>
</tr>
<tr>
<td>2110 W 43 Ave</td>
<td>6405 Knight St</td>
<td>8100 Granville</td>
</tr>
<tr>
<td>604.261.6366</td>
<td>604.321.6151</td>
<td>604.233.3160</td>
</tr>
<tr>
<td>Raven Song</td>
<td></td>
<td>North &amp; West</td>
</tr>
<tr>
<td>2450 Ontario St</td>
<td></td>
<td>Vancouver</td>
</tr>
<tr>
<td>604.709.6400</td>
<td></td>
<td>604.963.3700</td>
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Vancouver Coastal Health

For Immediate Release | Aug. 7, 2012

Get your child protected for kindergarten: Vaccinate now, before school starts

VANCOUVER, BC – Vancouver Coastal Health (VCH) is reminding all parents of children starting kindergarten this September to make sure that their vaccinations are up-to-date before schools open their doors.

North Van mother says unvaccinated kids put her son at risk

Vancouver, BC, Canada / (CKNW FM) AM980
Shelley Thomas
May 28, 2013 09:54 pm

"We've done everything to protect him, but we need help from everybody else."

A North Vancouver mother is urging parents to get their kids vaccinated, in an effort to protect her son, and other children with organ transplants.

Shannon Westerlund says her 34-year-old son Andrew has survived two autoimmune shots.
Westerlund won't give up.
"I don't want him to suffer like this again."

Physicians’ Update

March 20, 2013
From the Office of the Chief Medical Health Officer

Vancouver Coastal Health

For Immediate Release | May 15, 2014

Dad urges parents to vaccinate kids after son nearly dies from chicken pox

Vancouver, BC, Canada / (CKNW FM) AM980
Shelley Thomas
May 15, 2014 09:54 pm

"I saw the rate, I had to just turn away from them and badly, they are certainly not what we need them to be."

Westerlund says there are 300 other kids like Andrew.
Which Vancouver-area schools have the lowest measles vaccination rate?

Vancouver Coastal Health releases latest vaccination figures

By Tamara Baluja, CBC News  Posted: Apr 28, 2015 6:17 AM PT  |  Last Updated: May 04, 2015 12:45 PM PT

Explore the map to see which schools that report to the Vancouver Coastal Health authority are above and below the 95 per cent herd immunity level for measles vaccination rates.
TDaP - Polio Vaccine Coverage among Kindergarteners by CoCs
Vancouver Coastal Health, 2009/2010 - 2016/2017 Academic Year

Data source: VCH Primary Access Regional Information System
Prepared by: Public Health Surveillance Unit, Vancouver Coastal Health, November 2017
Rubella Vaccine Coverage among Kindergarteners by CoCs
Vancouver Coastal Health, 2009/2010 - 2016/2017 Academic Year

Data source: VCH Primary Access Regional Information System
Prepared by: Public Health Surveillance Unit, Vancouver Coastal Health, November 2017
Measles Vaccine Coverage among Kindergarteners by CoCs
Vancouver Coastal Health, 2009/2010 - 2016/2017 Academic Year

CoC Coverage  VCH Overall  BC Overall

Data source: VCH Primary Access Regional Information System
Prepared by: Public Health Surveillance Unit, Vancouver Coastal Health, November 2017
Zero Dose among Kindergarteners by CoCs
Vancouver Coastal Health, 2013/2014 - 2016/2017 Academic Year

Data source: VCH Primary Access Regional Information System
Prepared by: Public Health Surveillance Unit, Vancouver Coastal Health, November 2017

Vancouver Coastal Health
Promoting wellness. Ensuring care.
Conclusions

• Improved immunization rates by addressing service delivery
  • Immunize K students in schools
  • Consistency of practice via minimum service standards

• Rates improved – but appear to have reached a threshold for DaPTP
  • Selective vaccine acceptance
  • Program changes require monitoring
Acknowledgements

• Data: VCH Public Health Surveillance Unit

• Immunization Leadership:
  – VCH Regional Immunization Committee
  – VCH Regional Public Health Program Committee

• People who make it all happen: Program support staff, nurses, immunization nursing leaders, managers