A Model for a 3-County Regional Health Assessment
Linn, Benton, and Lincoln County

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What We Will Cover

• Who we are
• The assessment cycle and regional picture
• Timeline
• RHA model walkthrough
  • RHA report
  • Data warehouse
• Challenges and opportunities
Who We Are

- Linn, Benton, and Lincoln County Regional Health Assessment (RHA)
The Assessment Cycle

- Measuring Progress
- Gathering/Analyzing Data
- Reporting Data
- Identifying Priorities
- Using Data for Informed Planning/Implementation
The Regional Picture

Benton County
CHA/CHIP

Linn County
CHA/CHIP

Lincoln County
CHA/CHIP

CCO CAC
CHA/CHIP

Hospital IRS
CHNA

FQHC
Grant Cycle

Early Learning
Hub Assessment

Other Partner
Assessments
Team Formation and Steps

- 2012: Regional data needs unmet
- 2014: RHA team formation
- 2015: Data aggregation begins
- 2016: Regional report completion
- 2016: RHA begins year two
- Project sustainability
- Partner communication and support

Health system transformation
Regional Health Assessment

- Project management
- Partners
- Responsive team
- Reports & data access
- Data warehouse
Themes of the RHA

- Demographics
- Environment
- Social determinants of health
- Access to health care
- Disease and injury
- Health across the life course
RHA Report

Regional focus

- County highlights
- State comparisons
Writing the RHA Report

Narrative analysis

Data

Theory

Visuals

Narrative analysis
Narrative Report

Smoking during pregnancy is the single most preventable cause of illness and death among mothers and infants. Smoking during pregnancy increases the risk of stillbirth, low birth weight, sudden infant death syndrome (SIDS), preterm birth, cognitive and behavioral problems, and respiratory problems in both mother and child.

Children exposed to tobacco before birth are more than twice as likely to become regular smokers themselves later in life, compared with children not exposed to tobacco in utero. Women who quit smoking before pregnancy or early in pregnancy also significantly reduce their risk of prenatal complications.

On average in 2011-2013, 14.9 percent of mothers smoked during pregnancy in the region. This percentage is higher than both the state average of 10.5 percent and the Healthy People 2020 target of 1.4 percent. The age group of 18 to 19 years has the highest prevalence of maternal smoking during pregnancy at 29.8 percent, and the prevalence of smoking during pregnancy generally declines as the age of the mother increases.

Among the counties, the percentage of mothers who smoked during pregnancy varies, ranging from 7.8 percent in Benton County to 17.1 percent in Linn County and 19.2 percent in Lincoln County. While the overall rate of maternal smoking during pregnancy is higher in Lincoln County than in the other two counties, Linn County comprises the highest count of mothers who smoked during pregnancy, with a total of 737 mothers, compared with 249 mothers in Lincoln County and 169 mothers in Benton County.
Data Warehouse

Race and ethnicity of regional population versus K-12 population

- **Total population**
  - White: 85%
  - Hispanic of Latino: 75%
  - Asian and Pacific Islander: 8%
  - Multi-Ethnic: 14%
- **K-12 Population**
  - White: 8%
  - Hispanic of Latino: 2%
  - Asian and Pacific Islander: 3%
  - Multi-Ethnic: 3%
  - American Indian and Alaska Native: 1%
  - African American: 1%
  - Asian: 2%
  - American Indian: 6%
  - Other: 1%

### Table: Race and ethnicity of regional population versus K-12 population

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Population</th>
<th>K-12 Population</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHA Chapter 2 Data Team</td>
<td>3,15%</td>
<td>23,101</td>
<td>11.7%</td>
</tr>
<tr>
<td>Veteran Population - Total</td>
<td>3.71%</td>
<td>152,722</td>
<td>60.9%</td>
</tr>
<tr>
<td>K-12 Population</td>
<td>88 (X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K-12 Hispanic/Latino</td>
<td>8.24%</td>
<td>27,588</td>
<td>75.2%</td>
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<tr>
<td>K-12 Asian Pacific Islander</td>
<td>0.69%</td>
<td>282</td>
<td>0.8%</td>
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<tr>
<td>K-12 American Indian</td>
<td>3.50%</td>
<td>5,277</td>
<td>14.4%</td>
</tr>
<tr>
<td>K-12 Multi-Ethnic</td>
<td>1.13%</td>
<td>762</td>
<td>2.1%</td>
</tr>
<tr>
<td>K-12 Total Minority</td>
<td>1.12%</td>
<td>662</td>
<td>1.8%</td>
</tr>
<tr>
<td>K-12 Population characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population 5 years and older</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speak only English</td>
<td>5.31%</td>
<td>2,106</td>
<td>5.7%</td>
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<tr>
<td>K-12 Population characteristics</td>
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<tr>
<td>Population 5 years and older</td>
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<tr>
<td>Speak only English</td>
<td>1.76%</td>
<td>9,089</td>
<td>24.8%</td>
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<tr>
<td>K-12 Population characteristics</td>
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<tr>
<td>Population 5 years and older</td>
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<tr>
<td>Speak only English</td>
<td>5.80%</td>
<td>1,264</td>
<td>3.6%</td>
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<tr>
<td>K-12 Population characteristics</td>
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<tr>
<td>Population 5 years and older</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Speak only English</td>
<td>0.00%</td>
<td>237,040</td>
<td>100.0%</td>
</tr>
<tr>
<td>K-12 Population characteristics</td>
<td></td>
<td></td>
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<tr>
<td>Population 5 years and older</td>
<td></td>
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</tr>
<tr>
<td>Speak only English</td>
<td>2.46%</td>
<td>215,902</td>
<td>91.1%</td>
</tr>
</tbody>
</table>
Data Warehouse: Visuals

Example: Annual count of high-temperature days
Chapter 4 data downloads and processing protocols
Updated 8/21/15 by Miyuki Blatt

Data management protocol by Raw_Sheets:

Fertility Rates
Raw_TotalFR_HispNH_Counties
(2011-2013 Total fertility rates per 1,000 women: by Hispanic/Non-Hispanic for Linn, Benton, and Lincoln Counties and Oregon)

- Source: Oregon Public Health Assessment Tool (OPHAT), 2011-2013
- Website: [https://ophat.public.health.oregon.gov/Account/LogOn?ReturnUrl=%2f](https://ophat.public.health.oregon.gov/Account/LogOn?ReturnUrl=%2f)
- Date accessed: 07/2015

Access Instructions: Obtain an OPHAT account and login.
- Select “Fertility” under the Dataset tab, then select “Total Fertility Rate” under the Calculation tab.
- Select the desired counties individually under the “County” option and check the “Include State Totals” box.
- Select “Hispanic and NH Ethnicity” under the Race/Ethnicity tab and add all.
- Select the average number of years (3) under the dropdown menu in the Year tab and add the desired dates.
- Save query under your OPHAT account, if desired, and then run query.

- Standalone file: Total fertility rate by Hispanic NH_LBL Counties and Oregon_2011-2013.xls
- Processing steps: The data is processed by OPHAT with the above steps. Transpose the data to match the format of the Data Warehouse. Highlight the relevant data lines and copy them into the Master_Sheet.

- Raw_Sheet in Data Warehouse: Raw_TotalFR_HispNH_Counties
- Data fields: xxx
Challenges and Opportunities

• Accommodating cycles with different timelines
• Meeting data and analysis needs of different partners
• Balancing regional focus with counties’ needs for specificity and population health focus with partners’ needs for data on subpopulations
• Dealing with gaps in local public health data
• Creating a platform for accessible data and dynamic maps
• Using data to generate analyzable questions about the health of the region
• Eliminating redundancy among different health system entities
• Strengthening regional partnerships in community health
• Sealing gaps in local public health data
The Regional Picture

- Benton County: 2012 + 5 years
- Linn County: 2012 + 5 years
- Linn County: 2013 + 5 years
- Lincoln County: 2013 + 5 years
- 2012 + 5 years
- 2014 + 5 years
- Early Learning Hub Assessment
- Other Partner

CCO CAC
FQHC
Hospital IRS
CHNA
2014 + 5 years
2012 + 5 years
2012 + 5 years
2013 + 3 years
2012 + 5 years

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RHA Partner Needs

Geographic variation

Different populations served

Lincoln

Benton

Linn

OHP members

Children 0-6

Seniors

Rural Residents

(among others)
Challenges and Opportunities

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Thank You!

Questions?

Contact us at
LBLRHA@Co.Benton.OR.US