The Rural Health Information Survey: 
Selected Findings for Trinity County

Jessica Van Arsdale, MD, MPH 
Director, Health Research 
California Center for Rural Policy 

May 6, 2009
The Rural Health Information Survey (RHIS)

Purpose:
– To identify issues impacting health & access to health care in Del Norte, Humboldt, Trinity & Mendocino Counties.
– To provide Information for planning & policy development

• Conducted in Summer/ Fall 2006 by CCRP
• 4 page written survey
• Quantitative and Qualitative Questions
Sampled U.S. Post Offices & ZCTA Population Density
(People per sq. mile by ZCTA)
- **Sampled Post Offices (Labeled)**
- **Post Offices**
  - Less than 11
  - 11 - 50
  - Greater than 50

Data Sources: U.S. Postal Service, U.S. Census Bureau (2000)

http://www.humboldt.edu/ccrp
### Response Rates & Sample Sizes by County

<table>
<thead>
<tr>
<th>County</th>
<th>Rural Health Information Survey (RHIS)</th>
<th>California Health Interview Survey (CHIS)</th>
<th>Percent of Total Population Sampled (Census 2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Response Rate</td>
<td>Sample Size</td>
<td>2007 Sample Size</td>
</tr>
<tr>
<td>Trinity</td>
<td>14.9%</td>
<td>940</td>
<td>49*</td>
</tr>
<tr>
<td>Mendocino</td>
<td>11.2%</td>
<td>705</td>
<td>595</td>
</tr>
<tr>
<td>Del Norte</td>
<td>12.1%</td>
<td>421</td>
<td>82*</td>
</tr>
<tr>
<td>Humboldt</td>
<td>12.3%</td>
<td>880</td>
<td>622</td>
</tr>
<tr>
<td>More than 1 of the above</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.7%</td>
<td>2950</td>
<td>1322</td>
</tr>
</tbody>
</table>

*CHIS combines the counties of Del Norte, Trinity, Siskiyou, Lassen, Modoc, Plumas and Sierra*
<table>
<thead>
<tr>
<th>City/Town</th>
<th>ZIP code</th>
<th>Frequency</th>
<th>Percent of Trinity Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaverville</td>
<td>96093</td>
<td>349</td>
<td>37.2</td>
</tr>
<tr>
<td>Hayfork</td>
<td>96041</td>
<td>205</td>
<td>21.8</td>
</tr>
<tr>
<td>Lewiston</td>
<td>96052</td>
<td>76</td>
<td>8.1</td>
</tr>
<tr>
<td>Douglas City</td>
<td>96024</td>
<td>71</td>
<td>7.6</td>
</tr>
<tr>
<td>Junction City</td>
<td>96048</td>
<td>62</td>
<td>6.6</td>
</tr>
<tr>
<td>Trinity Center</td>
<td>96091</td>
<td>43</td>
<td>4.6</td>
</tr>
<tr>
<td>Burnt Ranch</td>
<td>95527</td>
<td>28</td>
<td>3.0</td>
</tr>
<tr>
<td>Mad River</td>
<td>95552</td>
<td>27</td>
<td>2.9</td>
</tr>
<tr>
<td>Big Bar</td>
<td>96010</td>
<td>22</td>
<td>2.3</td>
</tr>
<tr>
<td>Hyampom</td>
<td>96046</td>
<td>22</td>
<td>2.3</td>
</tr>
<tr>
<td>Ruth</td>
<td>955261</td>
<td>6</td>
<td>0.6</td>
</tr>
<tr>
<td>Bridgeville</td>
<td>955262*</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>Willow Creek</td>
<td>95573*</td>
<td>19</td>
<td>2.0</td>
</tr>
<tr>
<td>Alderpoint</td>
<td>95511*</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Cutten</td>
<td>95534*</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Fortuna</td>
<td>95540*</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>ZIP Code stamp unreadable</td>
<td>1</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>940</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*These are zip codes to which surveys were sent. They were returned by individuals who indicated Trinity was their primary county of residence.
# Race/Ethnicity of Respondents

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Trinity Sample</th>
<th>U.S. Census, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Trinity County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>White</td>
<td>821*</td>
<td>11,573*</td>
</tr>
<tr>
<td></td>
<td>88.0</td>
<td>88.9</td>
</tr>
<tr>
<td>American Indian</td>
<td>24*</td>
<td>631*</td>
</tr>
<tr>
<td></td>
<td>2.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>11*</td>
<td>517*</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Asian</td>
<td>4*</td>
<td>61*</td>
</tr>
<tr>
<td></td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Black/ African American</td>
<td>0*</td>
<td>58*</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.4</td>
</tr>
<tr>
<td>Other</td>
<td>31*</td>
<td>114*</td>
</tr>
<tr>
<td></td>
<td>3.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Multiracial</td>
<td>42</td>
<td>570</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>933</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

*1 Race alone
### Federal Poverty Level of Respondents

<table>
<thead>
<tr>
<th>Federal Poverty Level</th>
<th>Trinity Sample</th>
<th>U.S. Census, 2000 Trinity County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>≤99% FPL</td>
<td>116</td>
<td>14.4</td>
</tr>
<tr>
<td>100%-199% FPL</td>
<td>191</td>
<td>23.7</td>
</tr>
<tr>
<td>200%-299% FPL</td>
<td>162</td>
<td>20.1</td>
</tr>
<tr>
<td>≥300% FPL</td>
<td>336</td>
<td>41.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>805</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

Poverty Thresholds obtained from U.S. Census Bureau, “Poverty Thresholds 2006”
http://www.census.gov/hhes/www/poverty/threshld/thresh06.html
Access to Health Care

Within the past 12 months, were you able to get the healthcare (including mental healthcare) you needed? If no, please explain why.

No = 17.2% in Trinity County
Primary Reasons: Cost and Lack of Insurance
Trinity County:
Unable to Get Needed Health Care
\((n = 688)\)
Study Methods: The Rural Health Information Survey (RHIS) was conducted by the California Center for Rural Policy in the fall of 2006. A total of 23,806 surveys were mailed to a random sample of post office box holders in the four counties of Del Norte, Humboldt, Trinity and Mendocino. The total number of returned surveys was 3,003 for an overall response rate of 12.7%.

Percent of Respondents Without Adequate Health Care Access, 2006

- 30 - 40
- 25 - 29
- 20 - 24
- 15 - 19
- 10 - 14
- 0 - 9
- Low sample size

Public Lands
- National Forests, National & State Parks

1 Data derived from RHIS survey question (4): Within the past 12 mo., were you able to get the health care (incl. mental health care) you needed? Percentages are shown for survey respondents of each sampled post office.
2 Post offices with less than 20 survey responses were not included in analysis due to statistical instability.
3 Facilities shown are those classified as either 'General Acute Care Hospital' or 'Free or Community Clinics' in OSHPD's database.

Data Sources: ESRI, OSHPD, U.S. Postal Service; CCRP Rural Health Information Survey 2006

http://www.humboldt.edu/~ccrp
Quotes from Trinity County Respondents

*Within the past 12 months, were you able to get the healthcare (including mental healthcare) you needed? If no, please explain why.*

- “No. Access time- long waits, limited choices, long distance for more choice.”

- “No. Cannot afford the high cost- make borderline amount so not qualified for Medi-Cal without a lien on my house.”

- “No. My car has been down and I live 100 miles from good health care.”

- “No. snowed in all winter…but got e-mail consultation.”
Access to Health Care for Children

Within the past 12 months, were you able to get your children the healthcare (including mental healthcare) they needed?

If no, please explain why.

No = 10.3% in Trinity County

Primary Reasons:
- Difficulties finding and receiving mental health care
- Lack of health care providers
- Having to leave local area for care
Trinity County:
Unable to Get Needed Health Care for Children
(n = 135)

Federal Poverty Level of Respondent

<table>
<thead>
<tr>
<th>Percentage</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 99%</td>
<td>4.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%-199%</td>
<td></td>
<td>21.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200%-299%</td>
<td></td>
<td>7.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 300%</td>
<td></td>
<td>6.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Income Status of Respondent

<table>
<thead>
<tr>
<th>Status</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Income (&lt;200% FPL)</td>
<td></td>
<td></td>
<td></td>
<td>14.8%</td>
</tr>
<tr>
<td>Non Low-Income (≥200% FPL)</td>
<td></td>
<td></td>
<td></td>
<td>6.8%</td>
</tr>
</tbody>
</table>
Health Insurance and Use of the Emergency Department

What types of health insurance do you have?

During the past 12 months did you visit a hospital emergency room for your own health?
<table>
<thead>
<tr>
<th>County</th>
<th>Frequency</th>
<th>RHIS No Insurance</th>
<th>CHIS, 2007 No Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>% (95% CI)</td>
<td>% (95% CI)</td>
</tr>
<tr>
<td>Trinity</td>
<td>627</td>
<td>107</td>
<td>17.1 (14.2-20)</td>
</tr>
<tr>
<td>Del Norte</td>
<td>313</td>
<td>47</td>
<td>15.0 (11-19)</td>
</tr>
<tr>
<td>Humboldt</td>
<td>684</td>
<td>173</td>
<td>25.3 (22.1-28.6)</td>
</tr>
<tr>
<td>Mendocino</td>
<td>557</td>
<td>128</td>
<td>23.0 (19.5-26.5)</td>
</tr>
<tr>
<td>Total</td>
<td>2181</td>
<td>455</td>
<td>21.0 (19.3-22.7)</td>
</tr>
</tbody>
</table>

*CHIS combines the counties of Del Norte, Trinity, Siskiyou, Lassen, Modoc, Plumas and Sierra
Trinity County:
No Health Insurance by Poverty Level
(age 18-64) \( (n = 564) \)

<table>
<thead>
<tr>
<th>Federal Poverty Level of Respondent</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 99%</td>
<td>27.2%</td>
</tr>
<tr>
<td>100%-199%</td>
<td>33.6%</td>
</tr>
<tr>
<td>200%-299%</td>
<td>16.7%</td>
</tr>
<tr>
<td>≥ 300%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>
Trinity County:
Use of ER for Health Care in Past Year by Income Status ($n = 800$)

- Low-Income (<200% FPL): 31.7%
- Non Low-Income (≥200% FPL): 20.6%

Income Status of Respondent
Trinity County:
Use of ER for Health Care in Past Year by Insurance Status ($n = 750$)

<table>
<thead>
<tr>
<th>Insurance Status</th>
<th>Use of ER (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medi-Cal</td>
<td>52.2%</td>
</tr>
<tr>
<td>Private</td>
<td>21.9%</td>
</tr>
<tr>
<td>No Insurance</td>
<td>9.8%</td>
</tr>
</tbody>
</table>
Primary and Secondary Prevention
Trinity County: Meeting Recommendations* for Moderate or Vigorous Activity by Income Status ($n = 800$)

* Respondents were considered to be meeting recommendations if they reported 30 min of moderate activity at least 5 days a week and/or 20 minutes of vigorous activity at least 3 days a week (CDC Recommendations)
Trinity County: Daily Cigarette Smoking by Income Status ($n = 801$)

Income Status of Respondent

- Low-Income (<200% FPL): 19.7%
- Non Low-Income (≥200% FPL): 6.7%
Trinity County:
Teeth Cleaned in Past 2 Years by Income Status
(n = 744)

- Low-Income (<200% FPL): 57.6%
- Non Low-Income (≥200% FPL): 89.3%
Trinity County:
Screening for Diabetes in Past 5 Years by Income Status (age >45) ($n=497$)

Analysis excludes respondents who indicated they had a diagnosis of diabetes
Trinity County:
Mammogram in Past 2 years by Income Status
(women age 40-64) (n = 296)

Income Status of Respondent

Low-Income (<200% FPL) 45.2%
Non Low-Income (≥200% FPL) 79.2%
Trinity County: Recommended Colorectal Cancer Screening* by Income Status (age 50-64) ($n = 347$)

*Colonoscopy/Sigmoidoscopy in past 10 years and/or Fecal Occult Blood Test in past year
Trinity County:
Pap Test in Past 5 Years by Income Status (women age 18-64) \((n = 346)\)
Food Security

“In the last 12 months were you or people living in your household ever hungry because you couldn’t afford enough food?”
Very Low Food Security by County of Residence

(n = 2,906)

Estimates of very low food security:
Nation 4.0%
California 3.7%
Trinity County:
Very Low Food Security by Poverty Level of Respondent ($n = 803$)

- $\leq 99\%$: 26.7%
- $100\% - 199\%$: 7.9%
- $200\% - 299\%$: 2.5%
- $\geq 300\%$: 1.2%
Study Methods: The Rural Health Information Survey (RHIS) was conducted by the California Center for Rural Policy in the fall of 2006. A total of 23,006 surveys were mailed to a random sample of post office box holders in the four counties of Del Norte, Humboldt, Trinity and Mendocino. The total number of returned surveys was 3,003 for an overall response rate of 12.7%.

Percent of Respondents With Very Low Food Security

△ Low sample size

16 - 25
11 - 15
9 - 10
6 - 8
3 - 5
2

Total Population Below Poverty Level
Percent by Census Tract

29 - 44
23 - 28
17 - 22
14 - 16
9 - 13
5 - 8

Data Source: U.S. Census Bureau 2000.

1 Data derived from RHIS survey question (31): In the last 12 mo. were you or people living in your household ever hungry because you couldn’t afford enough food?

2 Percentages are shown for survey respondents of each sampled post office.

3 Post offices with less than 20 survey responses were not included in analysis due to statistical instability.

Data Source: CCRP. U.S. Postal Service; CCRP Rural Health Information Survey 2006.
Transportation

Is transportation a problem in meeting the health needs of you or your family?
Trinity County: Transportation as a Problem Meeting Health Needs
(n = 800)

Federal Poverty Level of Respondent:
- ≤ 99%: 40.4%
- 100%-199%: 23.8%
- 200%-299%: 13.6%
- ≥ 300%: 7.5%

Income Status of Respondent:
- Low-Income (<200% FPL): 30.0%
- Non Low-Income (≥200% FPL): 9.5%
Percent of Respondents With Transportation Impacting Health Needs

- 35 - 45
- 30 - 34
- 25 - 29
- 20 - 24
- 10 - 19
- 6 - 9
- Low sample size

Public Lands
- National Forests, National & State Parks

---

1 Data derived from RHIS survey question (49): Is transportation a problem in meeting the health needs of you or your family? Percentages are shown for survey respondents of each sampled post office.

2 Post offices with less than 20 survey responses were not included in analysis due to statistical instability.

Data Source: ESRI. U.S. Postal Service. CCRP Rural Health Information Survey 2006.
Phones, Computers & Internet Access

In your home do you have:
A Phone?
A Computer?
Internet Access?
Trinity County:
No Phone, Computer or Internet Access in the Home

Federal Poverty Level of Respondent

- No Phone
- No Computer
- No Internet
Do you have training in First Aid?

Do you have training in CPR?
CCRP Rural Health Information Survey: Percent of Respondents Without First Aid Training¹, 2006

Study Methods: The Rural Health Information Survey (RHIS) was conducted by the California Center for Rural Policy in the fall of 2006. A total of 23,006 surveys were mailed to a random sample of post office box holders in the four counties of Del Norte, Humboldt, Trinity and Mendocino. The total number of returned surveys was 3,003 for an overall response rate of 12.7%.

Percent of Respondents Without First Aid Training

- 60 - 65
- 55 - 59
- 50 - 54
- 45 - 49
- 40 - 44
- 25 - 39
- Low sample size²

Public Lands
- National Forests, National & State Parks

¹Data derived from RHIS survey question (50): Do you have training in first aid? Percentages are shown for survey respondents of each sampled post office.
²Post offices with less than 20 survey responses were not included in analysis due to statistical instability.

Data Sources: EBRU U.S. Postal Service, CCRP Rural Health Information Survey 2006.
Study Methods: The Rural Health Information Survey (RHIS) was conducted by the California Center for Rural Policy in the fall of 2005. A total of 23,606 surveys were mailed to a random sample of post office box holders in the four counties of Del Norte, Humboldt, Trinity and Mendocino. The total number of returned surveys was 3,003 for an overall response rate of 12.7%.

Percent of Respondents Without CPR Training

- 60 - 70
- 55 - 59
- 50 - 54
- 45 - 49
- 35 - 44
- 25 - 34

Public Lands

- National Forests, National & State Parks

1 Data derived from RHIS survey question (50): Do you have training in CPR?
2 Percentages are shown for survey respondents of each sampled post office. Post offices with less than 20 survey responses were not included in analysis due to statistical instability.
This research was funded by a grant from The California Endowment