Alaska Longitudinal Child Abuse and Neglect Linkage Project (ALCANLink)

Early Intervention and Prevention - Trustee Presentation
8/01/2018

ALCANLink allows cumulative risk estimation

Alaska Pregnancy Risk Assessment Monitoring System (Alaska PRAMS)

Follow-up
Administration and response
Maternal experiences

2009-2011

Alaska Longitudinal Child Abuse and Neglect Linkage Project (ALCANLink)

Survey
Administrative
Medical
Child Protection reports
Legal
EMS
Other records
Law enforcement
Descriptive Epidemiology

2009-2011 Births

- N = 3,549 PRAMS respondents (represents 33,417 births)
- 51.5% Male, 48.5% Female

Longitudinal cohort

<table>
<thead>
<tr>
<th>Common PHASE</th>
<th>PRAMS Sample</th>
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<tbody>
<tr>
<td>2009</td>
<td>[0,1)</td>
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<td>[2,3)</td>
<td>[3,4)</td>
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<td>2010</td>
<td>[3,5)</td>
<td>[4,5)</td>
<td>[5,6)</td>
<td>[6,7)</td>
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<td>2011</td>
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<td>[7,8)</td>
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<td>2016</td>
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</table>

Calendar year

Age year

PRAMS

PFD

Mortality

Child Protection reports
Life course perspective

Life can start with and develop differential health trajectories over the life course.
• Assets and deficits support or reduce healthy development
• Prevention/intervention timing during the life course can have different expected impacts on health
• Lifetime burden (Risk) is important to measure to inform public health prevention efforts

Contact with OCS before age 8 years


33,417 AK births

Reported
Screened In
Substantiated
Maltreatment burden

Annual Prevalence
(children ages 0-17 years, 2012-2015)

~10% of the child population reported to OCS annually in Alaska.

Cumulative Incidence
(reported to OCS before age x)

Reported physical or sexual abuse, physical neglect, or emotional neglect. (BRFSS 2014-2015)

Adult prevalence
(recall of experiences during childhood)

Adverse Childhood Experiences (ACE)

Collaborative study between CDC researchers and Kaiser Permanente

>17,000 participants of an HMO asked about events before age 18

75% white (54% female, 46% male), mean age 57, 75% at least some college.
Household dysfunction

**ACES groupings**

- **ABUSE**
  - Physical
  - Emotional
  - Sexual

- **NEGLECT**
  - Physical
  - Emotional
  - Medical Neglect
  - Educational Neglect

- **HOUSING DYSFUNCTION**
  - Homelessness
  - Partner going to jail
  - Being in a fight
  - Losing job even though wanted to keep working
  - Partner losing job
  - Arguing with partner more than usual
  - Close family member very sick or hospitalized
  - Separated/divorced
  - Moved to a new address
  - Partner said they didn’t want pregnancy
  - Has a lot of bills couldn’t pay
  - Someone close had problem with drinking/drugs
  - Someone close died

**PRAMS Questions: 12 months prior to birth**

1. Being homeless
2. Husband/partner went to jail
3. Being in a fight
4. Loss of job even though wanted to keep working
5. Husband/partner lost job
6. Argued with husband/partner more than usual
7. Close family member very sick or hospitalized
8. Separated/divorced
9. Moved to a new address
10. Husband/partner said they didn’t want pregnancy
11. Has a lot of bills couldn’t pay
12. Someone close had problem with drinking/drugs
13. Someone close died

**16%** of children born to mothers reporting that during the 12 months prior to birth they experienced at least **4 of these 13 life events**

1. Being homeless
2. Husband/partner went to jail
3. Being in a fight
4. Loss of job even though wanted to keep working
5. Husband/partner lost job
6. Argued with husband/partner more than usual
7. Close family member very sick or hospitalized
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11. Has a lot of bills couldn’t pay
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13. Someone close died

The risk of a child welfare contact increases with the number of stressors reported.
Household dysfunction

Children born into households with moms reporting 4 or more stressors are 2.8 (95%CI 2.4, 3.4) times as likely to be reported to OCS before age 8 compared to those reporting <4 stressors.

Disparities

Race
Maternal Education
Marital Status
Disparities: cont.

<table>
<thead>
<tr>
<th>Region</th>
<th>Cumulative incidence (%)</th>
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<tbody>
<tr>
<td>Y-K Delta</td>
<td>48.9 (35.0, 63.6)</td>
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<tr>
<td>Northwest</td>
<td>47.9 (34.8, 61.0)</td>
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<tr>
<td>Southwest</td>
<td>39.3 (18.5, 60.3)</td>
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<tr>
<td>Other Southeast – South</td>
<td>33.7 (5.6, 66.3)</td>
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<tr>
<td>Juneau</td>
<td>33.6 (17.1, 50.3)</td>
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<tr>
<td>Anchorage</td>
<td>33.5 (27.5, 39.4)</td>
</tr>
<tr>
<td>Other Southeast – North</td>
<td>31.6 (13.2, 49.9)</td>
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<tr>
<td>Kenai</td>
<td>30.2 (16.7, 43.8)</td>
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<tr>
<td>Fairbanks</td>
<td>22.9 (15.4, 30.4)</td>
</tr>
<tr>
<td>Other Interior</td>
<td>21.4 (11.3, 31.4)</td>
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<tr>
<td>Mat-Su</td>
<td>19.6 (12.9, 26.3)</td>
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</tbody>
</table>
Factors reported at age 3 of child

ILP – ever (CUBS)
SPED – ever (CUBS)

Head Start - Ever
Concern (past 12 months) gets along...

Sought professional help about concern
Past week days  read a book or story

Since child born: Diagnosed with Depression
Since child born: Someone close had bad problem with drinking or drugs

![Graph showing cumulative incidence to first report before age 8 years by maternal education level reported at birth, ALCANLink 2009:11 births]

**Protective factor - Education**

Cumulative incidence to first report before age 8 years by maternal education level reported at birth, ALCANLink 2009:11 births

- Children born to mothers with <12 years education 3.5 times as likely to be reported to OCS before age 8!
Education Protective factor Killer - IPV

Cumulative incidence to first report before age 8 years by maternal education level reported at birth, ALCANLink 2009:11 births

<table>
<thead>
<tr>
<th>Maternal education</th>
<th>Race</th>
<th>Full Model</th>
<th>Final Model</th>
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</thead>
<tbody>
<tr>
<td>&lt;12 Years</td>
<td>Alaska Native</td>
<td>0.92 (0.44, 1.98)</td>
<td>0.93 (0.44, 1.98)</td>
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<td>non-Native</td>
<td>0.93 (0.34, 2.57)</td>
<td>0.93 (0.34, 2.57)</td>
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<tr>
<td>12+ Years</td>
<td>Alaska Native</td>
<td>3.86 (1.97, 7.55)</td>
<td>3.88 (2.25, 6.71)</td>
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<tr>
<td></td>
<td>non-Native</td>
<td>3.91 (1.84, 8.30)</td>
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</tr>
</tbody>
</table>

Disparity and risk

A disparity is something that should be described and understood between populations to ensure intervention/prevention is appropriate

Compared to White Children, Alaska Native Children:

~2.5x the risk

Race doesn’t define risk, rather the disproportional load of factors that are modifiable and preventable.
Questions?

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