

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)



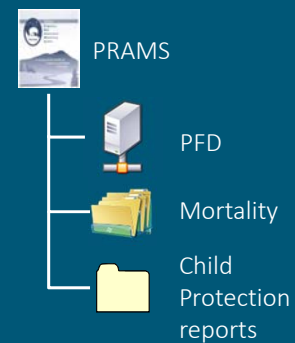
Descriptive Epidemiology

2009-2011 Births

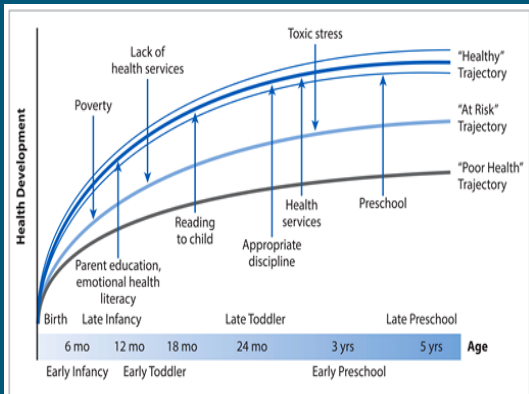
- N = 3,549 PRAMS respondents (represents 33,417 births)
- 51.5%_w Male, 48.5%_w Female

Longitudinal cohort

Common PHASE	PRAMS Sample								
		PRAMS Sample							
			PRAMS Sample						
	2009	2010	2011	2012	2013	2014	2015	2016	
	Calendar year								
Common PHASE	PRAMS Sample								
	[0,1)	[1,2)	[2,3)	[3,4)	[4,5)	[5,6)	[6,7)	[7,8)	
	Age year								



Life course perspective



Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017

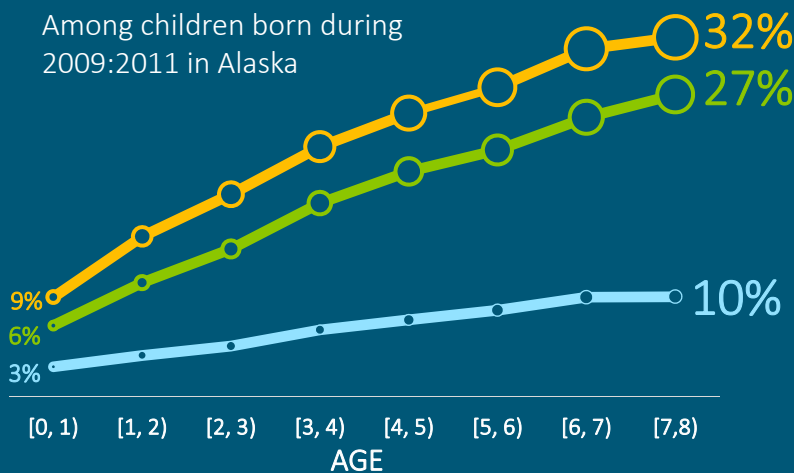
Life can start with and develop differential health trajectories over the life course.

- 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

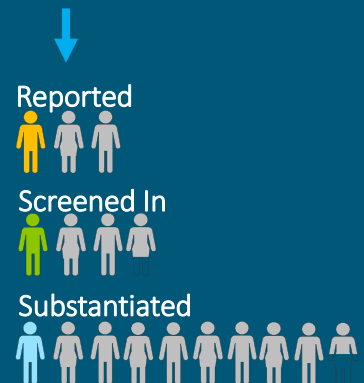


Contact with OCS before age 8 years

Among children born during 2009:2011 in Alaska

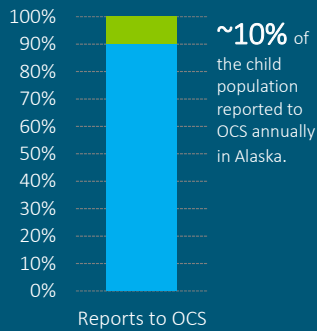


33,417 AK births

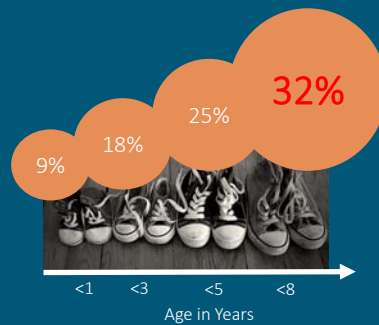


Maltreatment burden

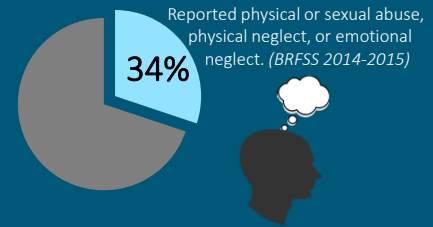
Annual Prevalence
(children ages 0-17 years, 2012-2015)



Cumulative Incidence
(reported to OCS before age x)



Adult prevalence
(recall of experiences during childhood)

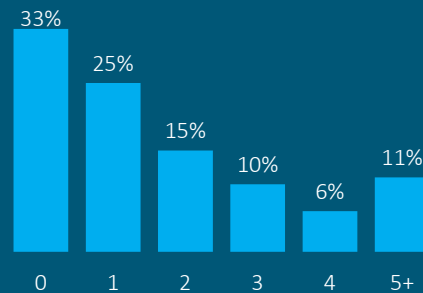
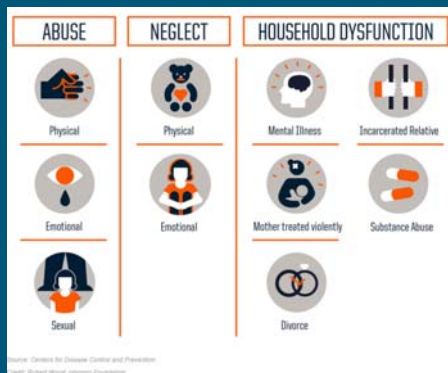


Adverse Childhood Experiences (ACE)

Collaborative study between CDC researchers and Kaiser Permanente¹

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

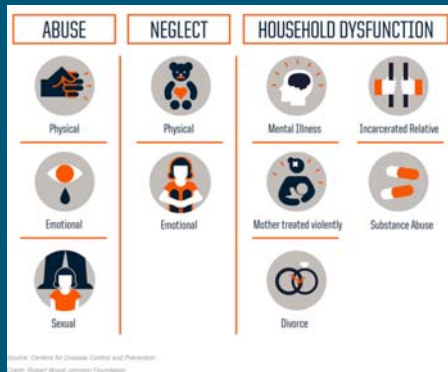
75% white (54% female, 46% male), mean age 57, 75% at least some college.



¹ Felitti, Vincent J., et al. "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study." *American journal of preventive medicine* 14.4 (1998): 245-258.

Household dysfunction

ACES groupings



PRAMS Questions: 12 months prior to birth

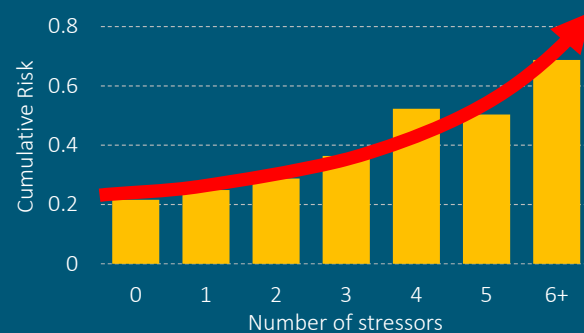
1. Being homeless
2. Husband/partner went to jail
3. Being in a fight
4. Loss of job even though wanted to keep working
5. Husband/partner lost job
6. Argued with husband/partner more than usual
7. Close family member very sick or hospitalized
8. Separated/divorced
9. Moved to a new address
10. Husband/partner 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

Household dysfunction

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

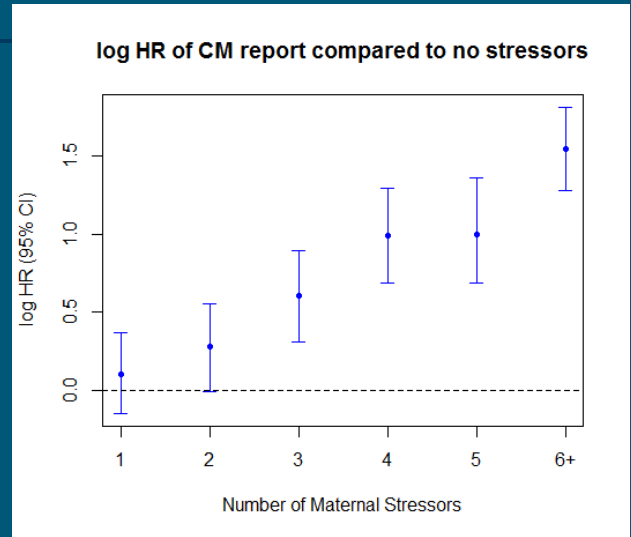
1. Being homeless
2. Husband/partner went to jail
3. Being in a fight
4. Loss of job even though wanted to keep working
5. Husband/partner lost job
6. Argued with husband/partner more than usual
7. Close family member very sick or hospitalized
8. Separated/divorced
9. Moved to a new address
10. Husband/partner 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

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



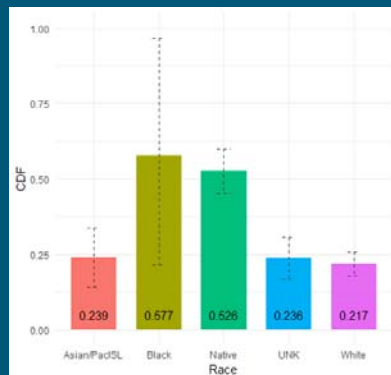
Household dysfunction

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.

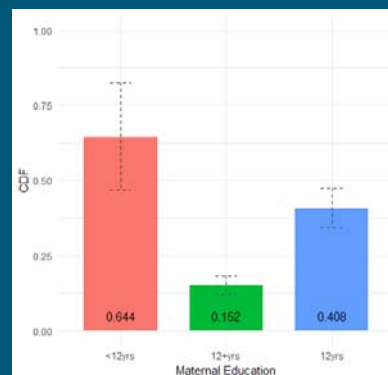


Disparities

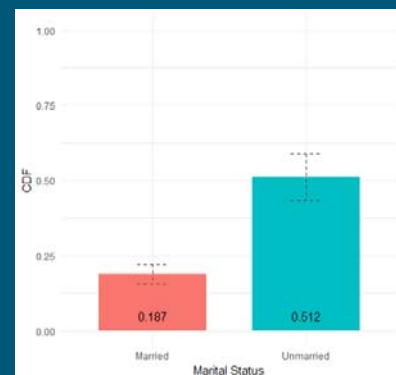
Race



Maternal Education

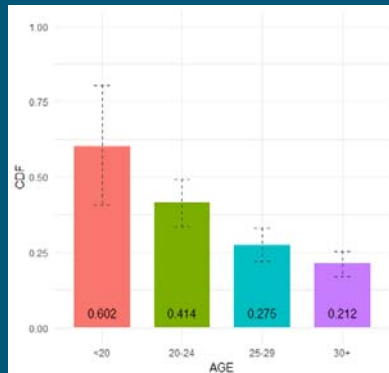


Marital Status

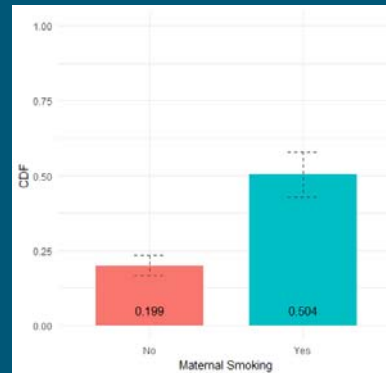


Disparities: cont.

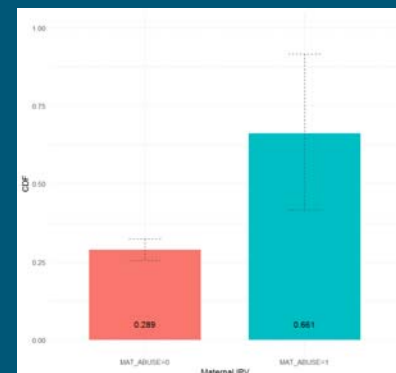
Age



Maternal Smoking

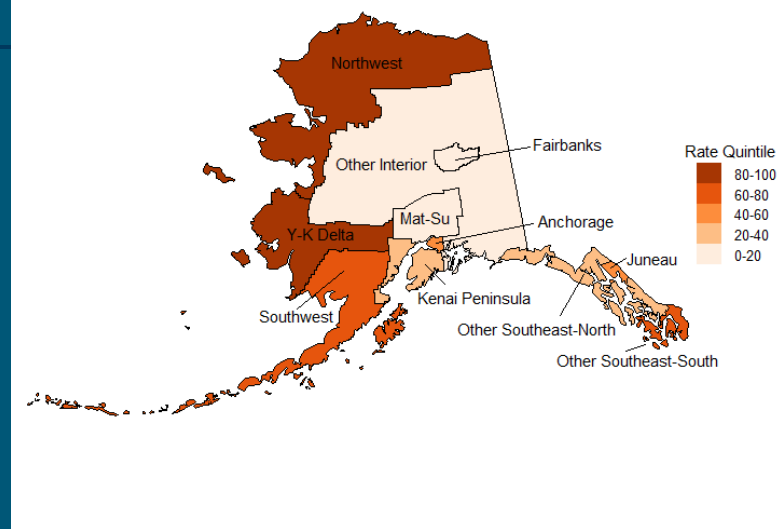


Marital IPV



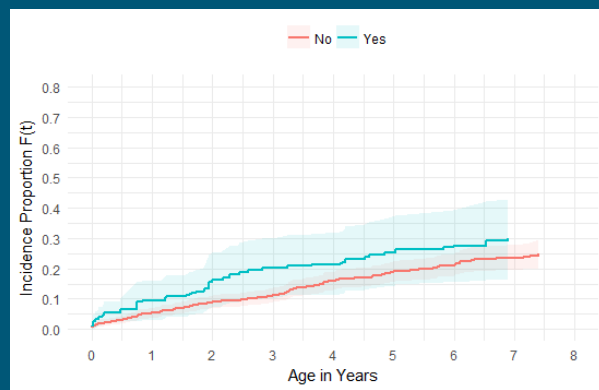
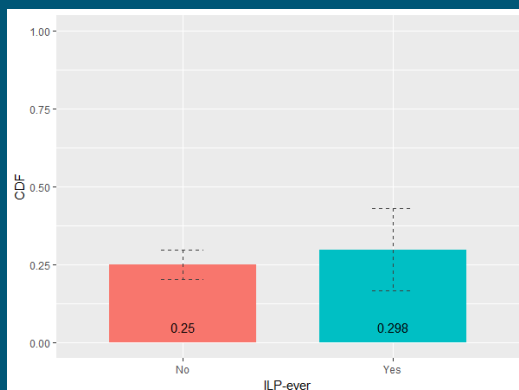
Region	Cumulative incidence (%)
Y-K Delta	48.9 (35.0, 63.6)
Northwest	47.9 (34.8, 61.0)
Southwest	39.3 (18.5, 60.3)
Other Southeast – South	33.7 (5.6, 66.3)
Juneau	33.6 (17.1, 50.3)
Anchorage	33.5 (27.5, 39.4)
Other Southeast – North	31.6 (13.2, 49.9)
Kenai	30.2 (16.7, 43.8)
Fairbanks	22.9 (15.4, 30.4)
Other Interior	21.4 (11.3, 31.4)
Mat-Su	19.6 (12.9, 26.3)

Behavioral Health Region

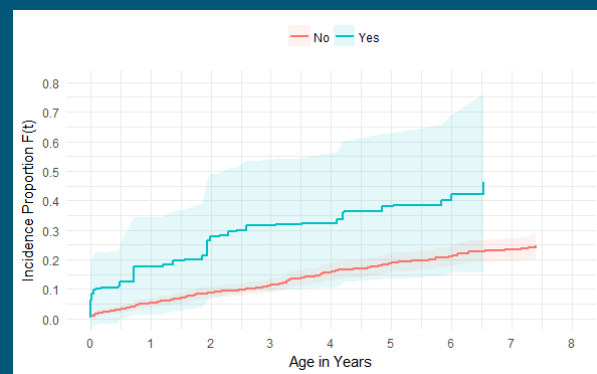
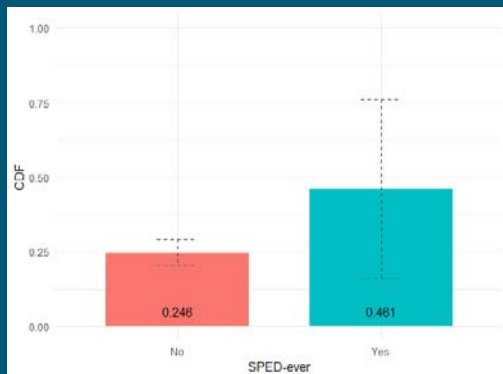


Factors reported at age 3 of child

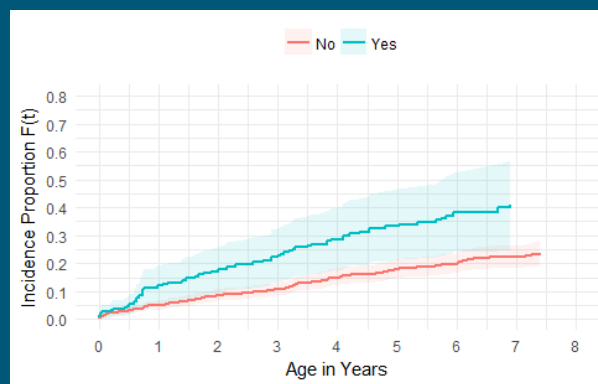
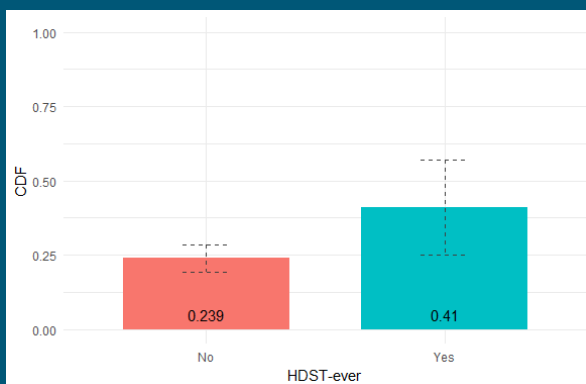
ILP – ever (CUBS)



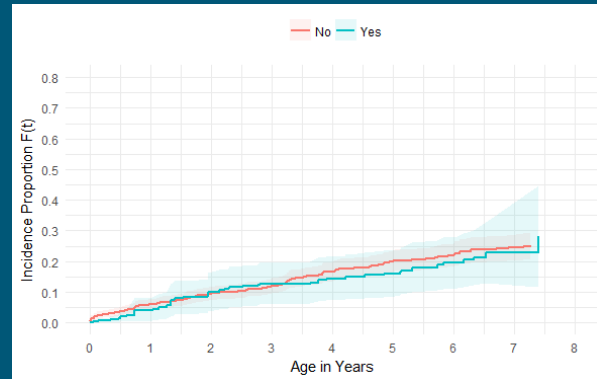
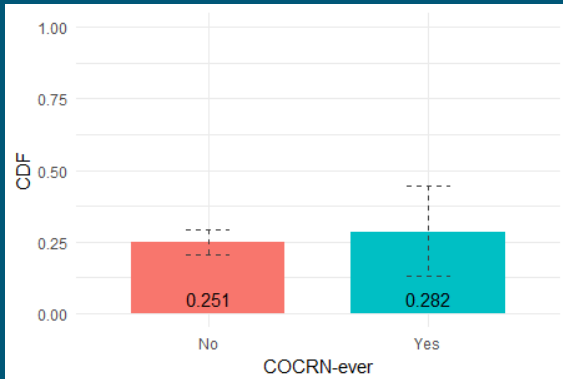
SPED – ever (CUBS)



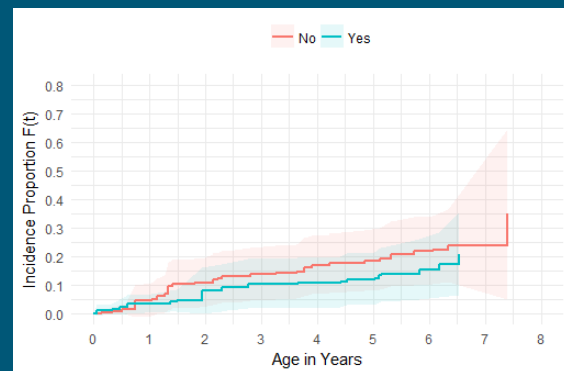
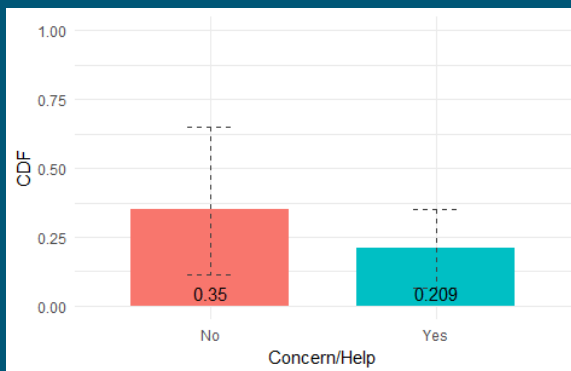
Head Start - Ever



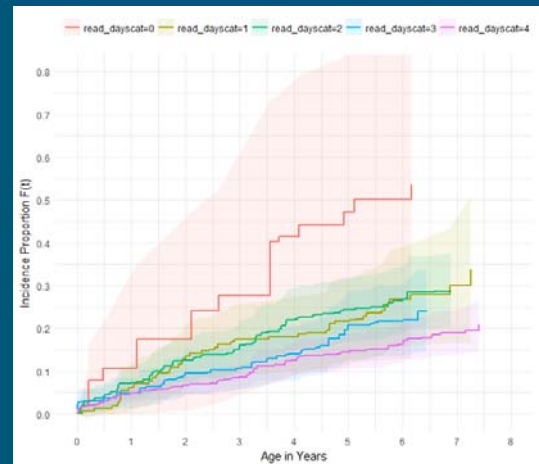
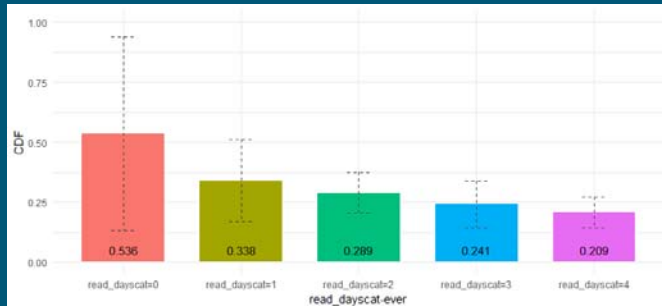
Concern (past 12 months) gets along...



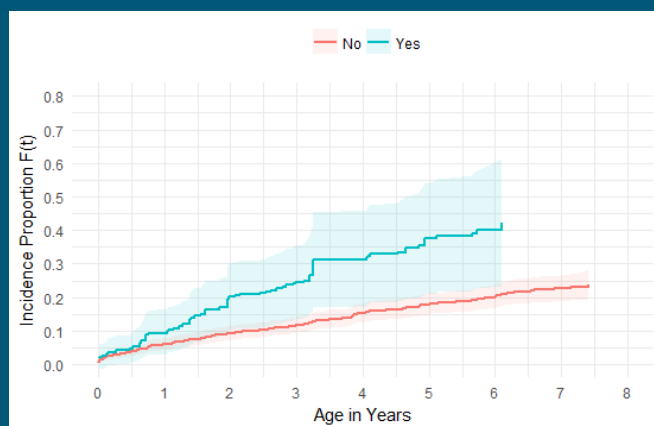
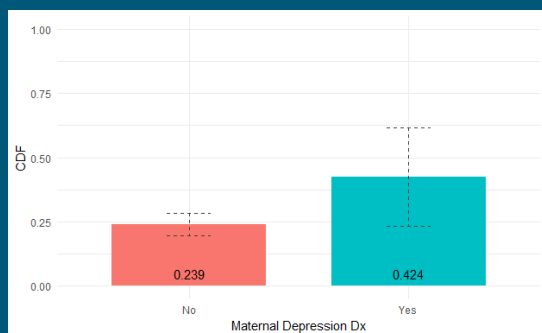
Sought professional help about concern



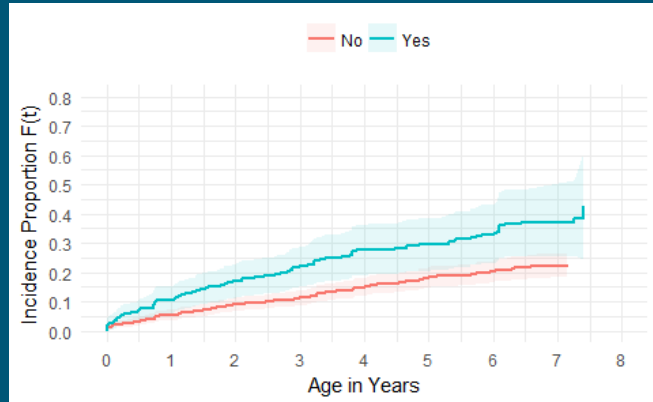
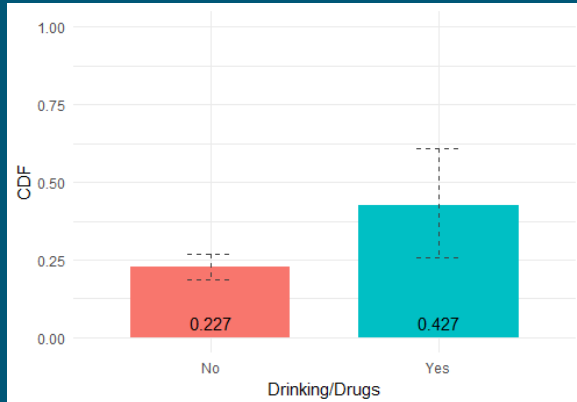
Past week days read a book or story



Since child born: Diagnosed with Depression



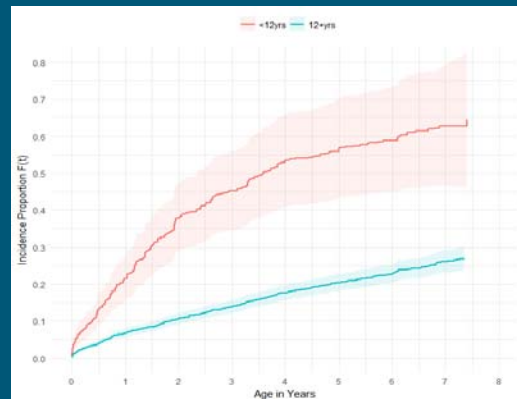
Since child born: Someone close had bad problem with drinking or drugs



Protective factor - Education

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

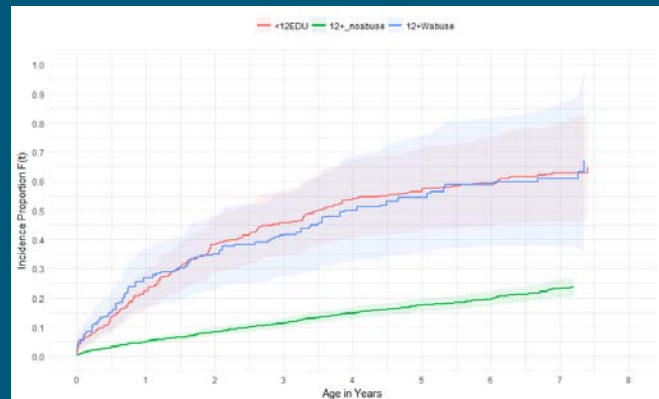
- Children born to mothers with <12 years education 3.5 times as likely to be reported to OCS before age 8!



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

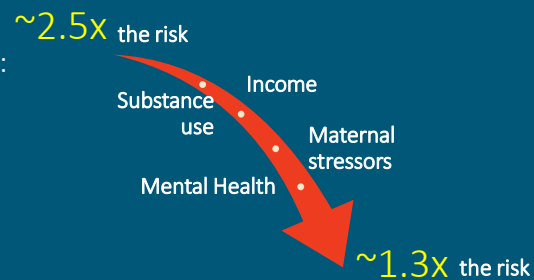
Maternal education	Race	Full Model ^a	Final Model ^b
<12 Years			0.93 (0.44, 1.98)
	Alaska Native	0.92(0.41, 1.98)	
12+ Years	non-Native	0.93 (0.34, 2.57)	
			3.88 (2.25, 6.71)
12+ Years	Alaska Native	3.86 (1.97, 7.55)	
	non-Native	3.91 (1.84, 8.30)	



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:



Race doesn't define risk, rather the disproportionate load of factors that are modifiable and preventable.

Questions?

Jared Parrish PhD
Senior Epidemiologist
Alaska Division of Public Health, MCH-Epidemiology Unit
jared.parrish@alaska.gov
907.269.8068