

RurAL CAP

Alaska State of Reform Health Policy Conference



PANEL: Integrating the Social Determinants into a Care Model



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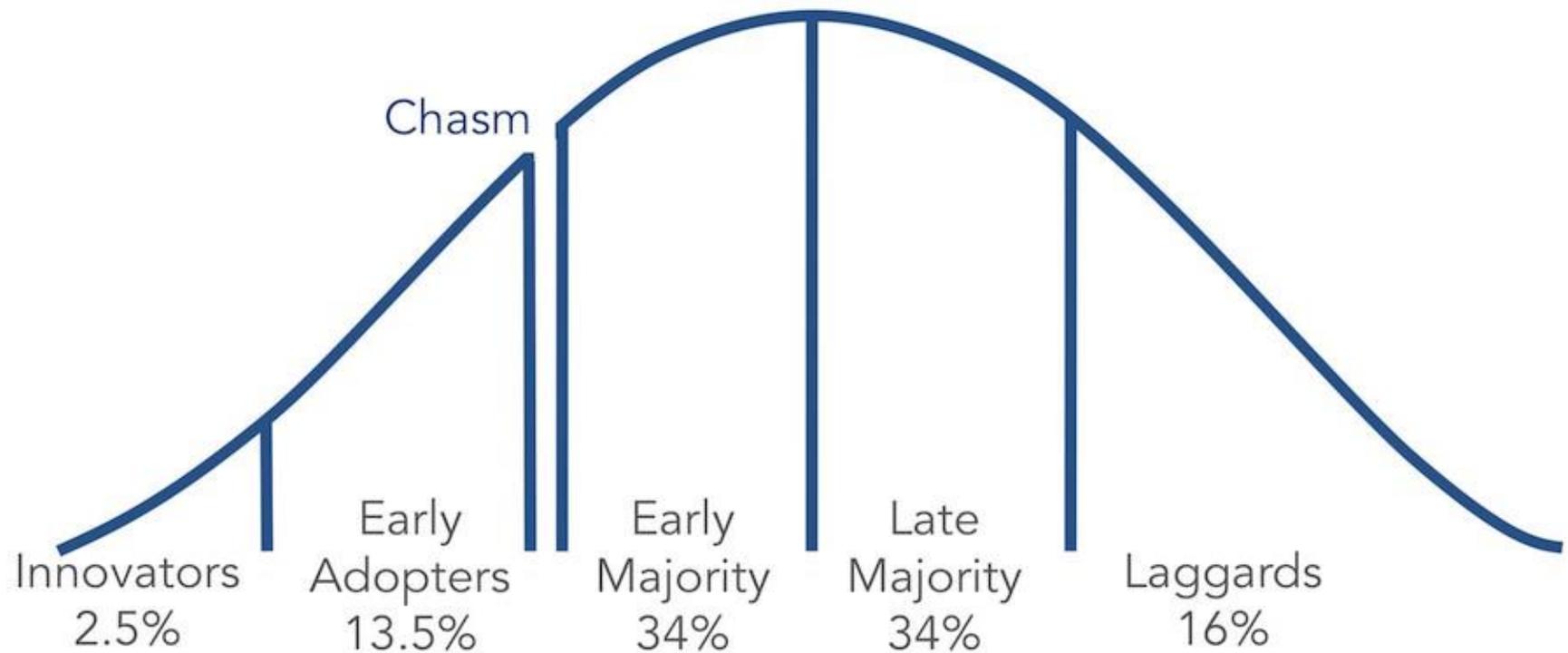
CEO, RurAL CAP

Patrick is the father of 3 adult children, and the CEO for RurAL CAP. A 1975 graduate of Princeton University (Woodrow Wilson School) and a 1978 graduate of the University of Michigan Law School, Patrick has been an attorney in Alaska since 1978. Selected as an Outstanding Young Man of America in 1988, he has served as a municipal lobbyist, Director of an Economic Development Center, an Assistant Professor at the University of Alaska Southeast, Chief Executive Officer of two Alaska Native non-profit health organizations and as a Tribal Health Director.

Mr. Anderson served on the board of Sealaska Corporation for 29 years and is President of the Native American Children's Alliance. He has also served on the Alaska Native Justice Center, Alaska Native Health Board as a Tribal Health Director, the Alaska Native Heritage Center, as co-chair of the Alaska Federation of Natives Human Resources Committee and as a Commissioner for the Alaska Rural Justice and Law Enforcement Commission.



Diffusion of Innovation



Jerrod Carmichael

(Comedian/Actor)

“All of my life is just me trying to overcompensate for a poor childhood. I buy a lot of shoes, a lot of sneakers. In fact, the next time you see like a young black guy in new shoes, stop and ask him who hurt you. I’m telling you, every pair of Jordan's comes with a story. Every pair.”



The Fear Response

The 11 year old boy is woken by the screaming of his mother around 3 am in the morning. He has heard this before. Protect yourself and your younger sisters from Mom's boyfriend, he thinks. As he goes from his bedroom through the kitchen to his sisters room, he grabs a cast iron fry pan. His sisters are also awake, and fearful. He herds all 4 of them into their closet, then stands in front of them brandishing the frying pan. He remembers nothing more to this day.



ACE STUDY

10 Adverse Experiences studied

- Absent biological parent
- Alcoholic parent
- Depressed parent/family member
- Parent in prison
- Witness parental domestic violence
- Victim contact sexual abuse
- Physical abuse
- Emotional abuse
- Physical neglect
- Emotional neglect

Strong correlation & causation for both health issues and behavioral problems later in life



Poverty & Hidden Rules Among Classes

- Living in poverty (difficult to leave)
 - Generational
 - Situational
- Hidden Rules Developed
- Heavy focus on Relationships
 - Support survival
 - Will fight for relationships (e.g. gangs)
- Poverty supports Toxic Stress expression

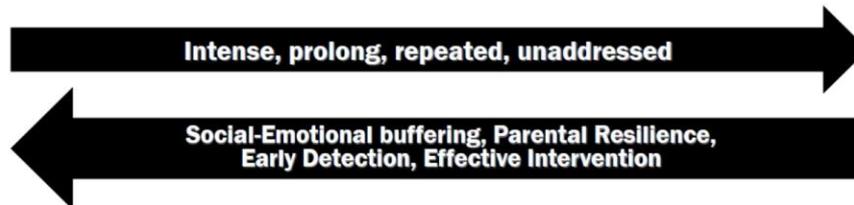


Toxic Stress

Harvard Center for the Developing Child Model of Stress



Positive Stress	Tolerable Stress	Toxic Stress
<ul style="list-style-type: none"> • Normal and essential part of healthy development • Brief increases in heart rate and blood pressure • Mild elevations in hormonal levels • Example: tough test at school. Playoff game. 	<ul style="list-style-type: none"> • Body's alert systems activated to a greater degree • Activation is time-limited and buffered by caring adult relationships • Brain and organs recover • Example: death of a loved one, divorce, natural disaster 	<ul style="list-style-type: none"> • Occurs with strong, frequent or prolonged adversity. • Disrupts brain architecture and other organ systems. • Increased risk of stress-related disease and cognitive impairment. • Example: abuse, neglect, caregiver substance abuse



Nutritional Deficits

- Hunger (& Homeless) component of ACE's
 - Physical Neglect
- Joseph Hibbeln, MD (NIH Research Scientist)
 - Omega 3 deficits contribute to suicide (14% increase for each SD under mean)
 - Also contributes to violent acts
- Bill W. (through Abram Hoffer, MD)
 - Niacinamide deficit contributes to depression



Nutritional & Addiction

- Mega dosing Vitamin C (20 grams daily)
 - Alleviates Opioid withdrawal cravings
- Mega dosing Niacinamide
 - Alleviates Alcohol withdrawal symptoms
- Mega dosing Vitamin D 3
 - Alleviates depression
- Supplementation with Omega 3
 - Reduction in violence, suicide
 - Increase in learning (bottom 20% child performance)



35+ Years Later

A 45 year old woman lies on her deathbed, life support being removed after 3 months of antibiotic treatment in a morphine induced coma failed to resolve massive lung infections. 3+ decades of smoking, later alcoholism, pre (or) diabetes, drug abuse and myriad other social problems plagued her life, stealing from her happiness. She left a husband, a grieving mother, never knew her father, had 3 children and a number of grandchildren. One life lived poorly, indeed.

She was one of the sisters hiding in the closet.



Alaska Native Prevalence and Distribution of ACE's

- ACE's are common
- 27.9% of Alaska Natives have 4 Plus ACE's
 - 15.6% for Non Native Alaska's population
- Very likely underreported
 - Marcus JL, Bernstein KT, Philip S, Klausner JD. Sex. Transm. Dis.2009; 36(7): 422-424.
- Incredible Public Policy implications
 - That go largely ignored



Impact on Health

- 6+ = 20 year shorter life expectancy
- 4+ = 65% increase in Alcoholism
- 7+ = 35% attempt suicide
- 2+ = Higher rates of smoking
- 4+ = 2.5 times depression rate
- 4+ = 4x increase 15 YO Intercourse
 - Teen Pregnancy, STD, Early Birth
- 4+ = 500% increase in rapes reported



Lack of Knowledgeable & Coordinated Response



- Primary Medical Care
- Schools
- Child Care
- Juvenile Justice
- Family & Youth Services
- Behavioral Health
- Criminal Justice/Courts
- Sports/Arts/Music
- Rehabilitation
- Smoking Cessation
- Diet Centers/Programs



Negative Results Despite Success and Achievement

The little girl was sexually abused by her father, and then sold to his friends for sex. At times she would be cowering in the dark, locked in a closet, and fearing the footsteps that would announce the arrival of her abuser. She was molested, beaten, tortured, abused and caused to believe that she was the source of her own misery. Her mother wouldn't help. At age 6 years of age, her father tied her to a palm tree, in a snake infested swamp. Just because.

As she grew, she found the strength to first graduate from high school, then college and finally law school. She became a law professor, a litigator and finally a federal civil rights judge.

Today, she is blind, has suffered 4 different types of cancer, 2 auto immune diseases and never found an enduring relationship.

Was she truly successful? Was she Resilient? Not in the ways that count.

Judge Mary Elizabeth Bullock, "Judging Me" CreateSpace Independent
Publishing Platform (December 6, 2013)



New Suicide Prevention Paradigm

Table 1. Prevalence of Each Category of Adverse Childhood Experiences and ACE Score by Sex*

	No. (%)		
	Women (n = 9367)	Men (n = 7970)	Total (N = 17 337)
Adverse childhood experiences			
Emotional abuse	1227 (13.1)	602 (7.6)	1829 (10.5)
Physical abuse	2530 (27.0)	2382 (29.9)	4912 (28.3)
Sexual abuse	2310 (24.7)	1276 (16.0)	3586 (20.7)
Battered mother	1281 (13.7)	920 (11.5)	2201 (12.7)
Household alcohol/drug abuse	2759 (29.5)	1896 (23.8)	4655 (26.9)
Mental illness in household	1937 (20.7)	1058 (13.3)	2995 (17.3)
Parental separation or divorce	2293 (24.5)	1738 (21.8)	4031 (23.3)
Incarcerated household member	485 (5.2)	324 (4.1)	809 (4.7)
ACE score			
0	3271 (34.9)	3044 (38.2)	6315 (36.4)
1	2299 (24.5)	2237 (28.1)	4536 (26.2)
2	1443 (15.4)	1297 (16.3)	2740 (15.8)
3	969 (10.3)	685 (8.6)	1654 (9.5)
4	665 (7.1)	382 (4.8)	1047 (6.0)
5	390 (4.2)	212 (2.7)	602 (3.5)
6	210 (2.2)	74 (0.9)	284 (1.6)
≥7	120 (1.3)	39 (0.5)	159 (0.9)

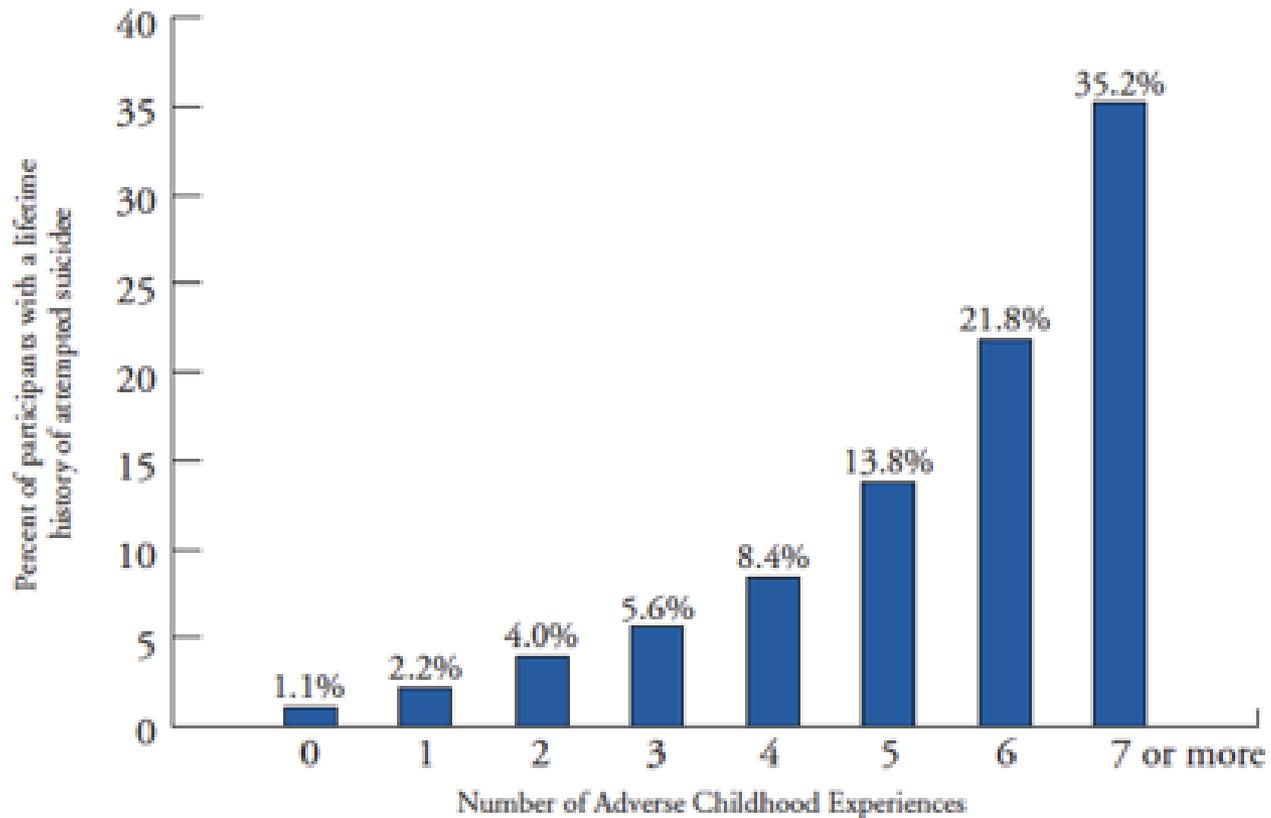
*For ACE Study waves 1 and 2 combined. ACE indicates adverse childhood experiences. See "Methods" for definitions of each type of adverse event.



Cohort Increase in Suicide Attempts

Figure 1¹⁰

NUMBER OF ADVERSE CHILDHOOD EXPERIENCES
AND LIFETIME HISTORY OF ATTEMPTED SUICIDE



Population Targeting

Target Population Alaska Native Men

Alaska Native Population 2015	By Sex	At Risk Age Range	ACE Prevalence	At Risk Number	Attempt Percentage	Attempts	Attempts per 100,000
143,367	Men 71,849	Men - other					
		44,754	7+ - .009%	1,260	35.20%	444	35,200
			6 - .016%	2,240	21.80%	488	21,800
			Men 15-34				
		27,095	5 - .035%	4,900	13.80%	676	13,800
	TOTAL		8,400		1608	70,800	
	Women 71,518		3 - .085%	11,900	5.6%	666	5,600
			4 - .06%	8,400	8.4%	706	8,400
			TOTAL	20,300		1372	14,000



Menu of Response to Toxic Stress

- Irritability/Anger/Violence
- Sadness or Depression
- Smoking
- Alcohol Abuse
- Drug Abuse
- Gambling
- Dropping Out
- Sports/Arts/Music
- Buying Stuff
- Theft
- Academic Achievement
- Head/Body Aches
- Health Issues
- Promiscuity
- Social Withdrawal
- Stomach problems
- Sugar Addiction/Obesity
- Gang Membership
- Fatigue
- Bully/Gossip
- Behavioral Health Issues
- Criminal behavior
- Catastrophizer
- Panic Attacks
- Bulimia/Anorexia
- Suicide Ideation/Attempt
- Extreme Jealousy



Healing Hypothesis

- Knowledge about what your ACE score and the behaviors developed in response to your dose of toxic stress can be liberating.
- Nutritional (not food) supports to start healing.
- Exercise (including Trauma release) and learning about your body's response to stress (Yoga, Qui Gong, Tai Chi)
- Mental supports (EMDR, EFT, Ericksonian Hypnosis, Meditation, Mindfulness, Positive Psychology)
- Might need professional help (Maslow's Continental Divide).



Gunalchéesh

*“Knowing is not enough; we must apply.
Willing is not enough; we must do.”*

Goethe

