

**ALASKA STATE LEGISLATURE
HOUSE JUDICIARY STANDING COMMITTEE**

February 20, 2023

1:30 p.m.

MEMBERS PRESENT

Representative Sarah Vance, Chair
Representative Ben Carpenter
Representative Craig Johnson
Representative David Eastman
Representative Andrew Gray
Representative Cliff Groh

MEMBERS ABSENT

Representative Jamie Allard, Vice Chair

COMMITTEE CALENDAR

PRESENTATION(S): ADVERSE CHILDHOOD EXPERIENCES

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

TREVOR STORRS, President and CEO
Alaska Children's Trust
Juneau, Alaska

POSITION STATEMENT: Co-presented a PowerPoint, titled "HJUD ACEs," during the presentation on Adverse Childhood Experiences.

JARED PARRISH, PhD, Senior MCH Epidemiologist
Department of Health
Juneau, Alaska

POSITION STATEMENT: Co-presented a PowerPoint, titled "HJUD ACEs," during the presentation on Adverse Childhood Experiences.

LINDA CHAMBERLAIN, PhD, Epidemiologist/Consultant
Homer, Alaska

POSITION STATEMENT: Co-presented a PowerPoint, titled "HJUD ACEs," during the presentation on Adverse Childhood Experiences.

ACTION NARRATIVE

[1:30:10 PM](#)

CHAIR SARAH VANCE called the House Judiciary Standing Committee meeting to order at 1:30 p.m. Representatives Vance, Carpenter, Johnson, Eastman, Gray, Groh were present at the call to order.

PRESENTATION(S) : ADVERSE CHILDHOOD EXPERIENCES

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CHAIR VANCE announced that the only order of business would be a presentation on Adverse Childhood Experiences (ACEs).

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TREVOR STORRS, President and CEO, Alaska Children's Trust, Co-presented a PowerPoint, titled "HJUD ACEs" [hard copy included in the committee packet]. He began on slide 2 by describing a 17,000-person population study conducted in California by Kaiser Permanente. He explained that the survey asked individual and parent participants questions in two categories: abuse and neglect, and household dysfunction. On slide 3, he reported the 10 most common ACEs. Of the participants that were asked about abuse and neglect, he outlined the top responses, which the responses were physical abuse, sexual abuse, emotional abuse, emotional neglect, and physical neglect. For participants that were asked about household dysfunction, he said substance abuse, parental separation/divorce, mental illness, domestic violence, and incarceration were top in those responses.

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MR. STORRS, in response to Chair Vance, highlighted the difference between emotional abuse and emotional neglect. Mr. Storrs explained that emotional neglect is where a person is holding off emotional interactions, whereas emotional abuse is more mental in nature.

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MR. STORRS presented study results regarding ACE score categories. He said that of the participants in the study, 33 percent reported a zero ACE score, 26 percent reported one, 16 percent reported two, 10 percent reported three, and 16 percent

reported over four ACEs. On slide 4, he said the study found that 87 percent of ACEs occur together.

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MR. STORRS said on slides 5 and 6 that a key objective of the study was to create and show the dose response relationship between ACEs. He said if there's a higher dose of ACEs, there's a higher risk of experiencing health and social problems. He referred to slides 7-11, which shows data between the number of ACEs and its correlation to early smoking, alcoholism, liver disease, suicide attempts, and domestic/sexual violence.

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REPRESENTATIVE EASTMAN, in reference to the presented data on crime perpetrators, asked what population the trust is looking at to say that a percent of that population is correlated with the ACEs score.

MR STORRS explained that ACEs are before the age of 18. In response to a follow up question, he said he did not know the number of participants who are being categorized as having committed and perpetrated sexual violence, but he agreed to forward the study to committee members by request of Chair Vance.

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MR STORRS returned to the presentation on slides 12-14. He explained that boys with an ACEs score of six or more are 46 times more likely to use IV drugs. He said they may also struggle with employment and absenteeism. He stressed that the study is not inclusive of all ACE adversities.

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JARED PARRISH, PhD, Senior MCH Epidemiologist, Alaska Division of Public Health. He started his presentation about ACEs in Alaska. He said it is critical for the committee to remember that ACE data is self-reported by adult participants recalling their childhood experiences before age 18. He said the division wanted to look at what was occurring in the Alaska population.

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DR. PARRISH presented slide 18. He said individual ACEs are common among Alaska Adults. Pointing to Centers of Disease and Control (CDC) data from 2013-2015, he said that the top three individual ACEs reported include: experiencing emotional abuse, substance misuse by an adult at home, and divorce of a parent. He moved on to slide 19 and detailed the data on the percent of Alaska adults reporting accumulated ACEs. He said 68.4 percent of adults in Alaska reported experiencing at least one ACE.

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CHAIR VANCE asked Dr. Parrish about a pandemic survey conducted in Alaska by the Department of Health, and if that data was available to overlap with the data being presented.

DR. PARRISH answered that the division does not know yet, but said the division is trying to develop the resources and data sources.

CHAIR VANCE asked where the data is being drawn from.

DR. PARRISH said that would be answered on the next slide.

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REPRESENTATIVE GRAY posed a hypothetical scenario where the spouse and child leave due to abuse. He asked about the nuance of whether the additional ACE from divorce might benefit the child.

DR. PARRISH said the division using a broad instrument to look at adversity in the home. He noted that there are intricacies that are exceptions.

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DR. PARRISH talked about the Alaska Longitudinal Child Abuse and Neglect Linkage project (ALCANLink) on slide 20. He described the division's Pregnancy Risk Assessment Monitoring system (PRAMS) as a population-based, mixed design survey of new mothers. He said Alaska is one of the four states that do a follow-up survey after three years; it gives the division another measure where they can calculate risk to health events. He shared that they are working on a project to bring in "backtrack" records, as well as have an agreement with juvenile justice data, in order to start looking at the family in a broader context.

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REPRESENTATIVE CARPENTER asked if his understanding of the data on slide 14 is correct. He offered his understanding that the 8 percent on the graph correlates with one ACE contributing to absenteeism, and he asked if that is within the 17,000 person sample. He further asked if the opposite is true in that the remaining 92 percent that reported one ACE did not have it contribute to absenteeism.

MR. STORRS said Representative Carpenter is correct in his understanding.

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DR. PARRISH moved to slide 21. He explained that original ACEs have been expanded to measure other adversities that can lead to trauma. He said there has been work to expand and adjust ACE scoring. He presented on slide 22 the percent of three-year-olds experiencing accumulated ACEs in Alaska. He reported that 47.3 percent of three-year-olds in Alaska have experienced at least one ACE. He broke down the top four individual ACEs: financial issues paying bills, parent job loss, substance abuse in close family, and neglect. He presented slides 23, 24, and 25 on the impact pre-birth challenges have on early childhood experiences. He said through ALCANLink, the division gauged pre-birth household experiences and its connection. He said that for each additional pre-birth challenge reported, there was a systemic relative increase in average childhood ACE score observed.

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DR. PARRISH moved to slides 26 and 27. He discussed changes in household challenges and predicting maltreatment. He said the division gauged the change of household challenges and its risk of ACEs. He reported that a change in the number of household challenges is associated with a change in risk of an Office of Child Services (OCS) report. He said this is the first time the division has evidence from a longitudinal cohort showing that, if there is a shift in the family challenges between two time periods, an effect on the risk of an OCS report is expected.

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REPRESENTATIVE EASTMAN asked, after the division made a prediction, how much the ACEs score of a child change or does not change.

DR. PARRISH replied that household challenges before the child is born are a strong predictor of elevated ACE scores, child maltreatment contacts, and poorer school performance.

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DR. PARRISH returned to the presentation on slides 28 and 29. He explained how pre-birth challenges predict school readiness and academic achievement. In gathering data about a child, he said the division collects Alaska Developmental Profile (ADP) data, the child's third-grade reading proficiency test, and average attendance to track performance. He explained that, as the number of pre-birth household challenges increase, so does the risk of the child performing worse. He said if there are over four birth challenges, there's a 16 percent increased risk of not performing adequately on the ADP, a 40 percent increased risk of scoring below or far below passing on the third-grade reading proficiency test, and a 29 percent increased risk of poorer attendance.

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DR. PARRISH showed a graphic on slide 30 depicting ACEs at age three and its effect on a child's school readiness. He moved to slide 31. He detailed the number of pre-birth challenges by OCS cases, and explained that, as the number of screened-in cases increase, the proportion with multiple prebirth challenges increases. He moved to slide 32 and reported that over 50 percent of those experiencing at least one OCS removal were born to mothers reporting two or more pre-birth household challenges. On slide 33, he said, pre-birth household challenges have not changed overtime. He presented a graphic with PRAMS data from 2009-2019 showing the phases of the survey.

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DR. PARRISH talked about connecting early indicators with child outcomes on slide 34. He explained that, if a child is born to a mother that reports she experienced partner violence, 63 percent of the children have impulse and emotional control problems by kindergarten, 90 percent have poor third-grade reading skills, 68 percent will be reported to OCS by age 9, have an ACE score twice as high, and have on average of over

four co-existing stressors. He announced a new survey aimed at adults while on slide 35. He said the goal of the new Overcoming ACEs with Resiliency (OARS) web survey is to collect ACEs data in the context of proactive experiences at each socio-ecological level. He said the division is beyond quantifying how many adults are experiencing ACEs in Alaska, but now understand how to mitigate and prevent ACEs. He shared that the survey is planned to come out in the next month. Dr. Parrish concluded his presentation on slides 36 and 37 by providing a historical timeline of the ALCANLink surveys.

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REPRESENTATIVE CARPENTER asked how many people who experience the range of negative possibilities that happen in home life, turn out productive citizens.

DR. PARRISH responded that that is the goal of the OARS survey.

REPRESENTATIVE CARPENTER asked for further clarification on the purpose of the survey.

DR. PARRISH explained that the overall intent is to better understand how the division can provide support to families who are experiencing challenges in their life. He said a critical component is helping families have a person to support them in their time of need.

REPRESENTATIVE CARPENTER requested Mr. Storrs to speak.

[2:22:14 PM](#)

MR. STORRS opined on quantifying prevention upstream.

REPRESENTATIVE CARPENTER questioned why it is only being communicated that bad negative experiences lead to bad outcomes.

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DR. PARRISH acknowledged that understanding, in spite of adversity, how people succeed and show success is critical. However, the data source he has been using as not designed for that intent. He said the division does not have good measures on how to detect that.

MR. STORRS explained that the idea of the ACEs study is to further understanding of an individual's choices in his/her adult life and the healing process that needs to happen.

REPRESENTATIVE CARPENTER asked for data that shows if addressing the experiences upstream via government services/funding is the solution.

MR. STORRS asked to hold the question for later. He said the presenters are not at the meeting to ask for more government services, but said society and government has a role.

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CHAIR VANCE noted that the presentation is just a snapshot of past data. She said if the data could move to measuring the success difference in individuals who had similar experience circumstances, it could be figured out how to start celebrating that.

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REPRESENTATIVE C. JOHNSON asked about the sample size of mothers in ALCANLink.

DR. PARRISH explained that one out of five live births are sampled; total of 11,000 mothers are represented within a ten-year period.

REPRESENTATIVE C. JOHNSON asked for further clarification on the PRAMS three-year follow-up survey.

DR. PARRISH said PRAMS was originally designed to survey mothers each year; in between the first and follow-up surveys, the division is linking the participants to administrative data sources.

REPRESENTATIVE C. JOHNSON asked if siblings have been considered in the data.

DR. PARRISH said the division is always looking for the ideal counter factual population to make inferences against, but explained that in Alaska, the number of sampled repeat mothers are too small to utilize their survey and weighted data. He shared that the division has successfully replicated ALCANLink in Oregon, and said he is assisting eight other states to provide a pooled analysis on changes in families. In response

to a follow-up question, he said they must design different models for urban and rural environments due to the difference in factors.

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REPRESENTATIVE EASTMAN asked for, in reference to the handout, titled "Vibrant Economy, Strong Workforce, Thriving Families Brief" [included in the committee packet], additional information on the estimated \$1.5 million lifetime cost per victim of fatal child abuse.

MR. STORRS said the initial collection of ACEs work began in 2016, and calculations were made of what the predicted cost of ACEs would be. He listed the ACEs factors considered in the cost calculations.

REPRESENTATIVE EASTMAN relayed an argument he heard that in the case where child abuse is fatal, it may be a benefit since government services are not needed over the course of the child's life.

MR. STORRS asked for clarification.

REPRESENTATIVE EASTMAN said it is argued that the death is a cost savings because the child does not need government services.

MR. STORRS said he is unsure how to answer on the cost savings from the death of a child.

REPRESENTATIVE EASTMAN asked if the \$1.5 million estimate is higher or lower depending on the age of the child at the time of his/her death.

MR. STORRS said there are several factors. He repeated that the loss of a child is immeasurable.

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DR. PARRISH interjected and explained the process of how the cost estimate is calculated.

REPRESENTATIVE EASTMAN asked if the estimate would be different or the same between a six month old and a newborn.

DR. PARRISH answered it would be marginally different.

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REPRESENTATIVE GROH asked Mr. Storrs how brain studies would be helpful.

MR. STORRS said the next speaker will speak on that.

[2:41:09 PM](#)

LINDA CHAMBERLAIN, PhD, Epidemiologist/Consultant, introduced herself. She began her part of the presentation on risk, resiliency and neuroplasticity on slides 39 and 40. She said her slides are not on numbers, but for understanding patterns and implications. She moved to slide 41 and presented on synaptic pruning. She pointed to a graphic showing the wiring of the brain at birth, 6 years old, and 14 years old.

[2:45:02 PM](#)

DR. CHAMBERLAIN talked about the sequential development of a child's brain, while presenting slide 42. She listed the "building blocks" of the brain, showing a graphic that correlates the increase in neuroplasticity with the development the brainstem, midbrain, limbic, and cortex. She highlighted on slide 43 how the early years are a sensitive period for development. She moved to slide 44 to explain the markers of positive, tolerable, and toxic stress.

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DR. CHAMBERLAIN presented a graphic on slide 45 regarding traumatic brain development. The graphic showed the differences between normal brain development and trauma development. She explained that the ideal cortical modulation ratio for normal brain development should be 2:1, and that a brain affected by developmental trauma is at a 1:1 ratio. She showed, on slide 46, a graphic depicting an example of how they talk to families "in an everyday way" about the thinking & learning brain, the survival brain, and how stress affects the brain's development.

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DR. CHAMBERLAIN explained on slide 47 the effects of toxic stress on a child's brain. She said the neural circuitry for dealing with stress is especially malleable during childhood.

She explained that toxic stress can affect hormone and neurotransmitter levels.

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DR. CHAMBERLAIN showed a graphic on slide 48. The graphic, sourced from the Center on the Developing Child at Harvard University, showed imagery on the physical impacts of persistent stress to the prefrontal cortex and hippocampus.

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DR. CHAMBERLAIN moved to slide 50 to talk about developmental disconnect and what behaviors were observed. She concluded her presentation on slide 51 and said that trauma interferes with learning.

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CHAIR VANCE thanked Dr. Chamberlain; she asked Mr. Storrs to speak.

[2:54:43 PM](#)

MR. STORRS spoke about ACEs scores for adult and children. He shared a quote by Dr. Rob Anda on slide 53: "What is predictable is preventable." On slide 54 he likened life to an elastic band, in that between positive, tolerable, and toxic stress, each add stress to the band. Mr. Storrs discussed resilience on slide 55. He talked about key resilient behaviors in a child. He showed data on slide 56 regarding resilience skills and special health care needs. He said that for each dollar invested into early childhood upstream, the state gets 7-13 dollars back.

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MR. STORRS spoke on strategies that address the needs of children and families. He outlined primary prevention strategies on slides 57, 58, and 59. He listed the strategies: connecting youth to caring adults, strengthening economic supports, providing quality childcare & early education, promoting culture, assisting in system navigation, fostering healthy relationships, enhancing parenting skills, and enhancing primary & mental health care. He concluded his presentation by saying trauma can't be prevented, but can be predicted, and by

providing the aforementioned protective factors, could reduce the long-term expense and impact to children and families.

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CHAIR VANCE entertained questions.

[3:01:47 PM](#)

REPRESENTATIVE GRAY thanked Mr. Storrs for the presentation. He shared his personal experience with ACEs scores and his child.

[3:02:53 PM](#)

REPRESENTATIVE EASTMAN asked whether putting funding towards preventing experiences like child abuse would be better for society.

MR. STORRS said, if the state doesn't want to continually see costs like corrections and Medicaid increase, there needs to be investment in prevention.

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CHAIR VANCE thanked the presenters.

[3:04:34 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Judiciary Standing Committee meeting was adjourned at 3:04 p.m.