

# **WELCOME: TOXIC STRESS/ACEs**

**John Lorenz, PhD**

**Mark Rains, PhD**

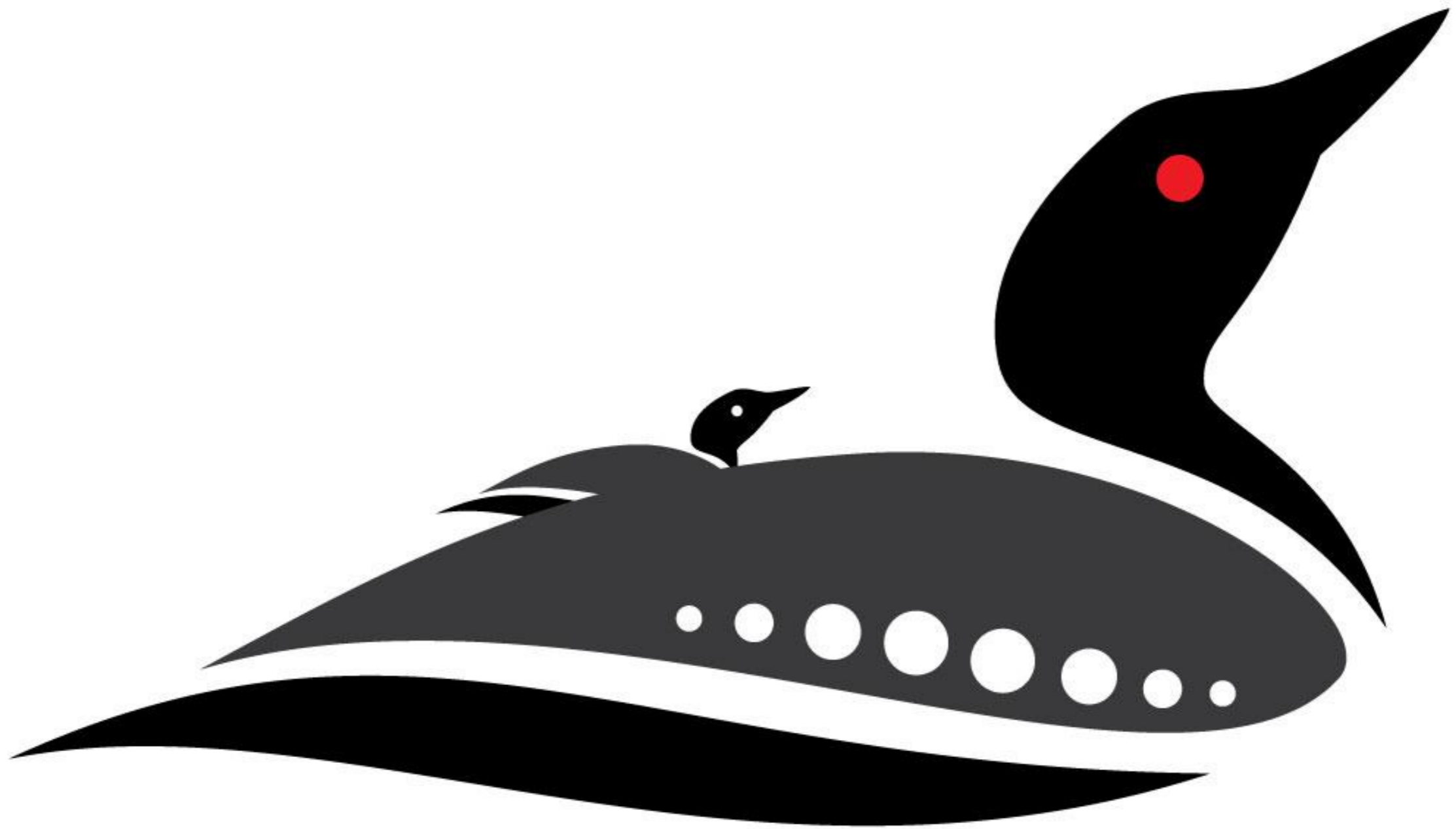
**Facilitator: Sue Mackey Andrews**



**AMERICAN ACADEMY OF PEDIATRICS,  
MAINE CHAPTER SPRING CONFERENCE**

**On the Path of Well-Being: Adversity, Poverty  
and Resilience**

**May 1-3, 2015**



Maine Resilience Building Network

# Welcome to the **Maine Resilience Building Network**



HOME ABOUT US RESOURCES MRBN NEAR YOU WHAT ARE ACES?



*Join today!  
How can you  
build resilience  
in your community?*

## ACE Study

**Start a conversation.** Adverse Childhood Experiences (ACEs)

## The Maine Resilience Building Network

Here you will find information about the Adverse Childhood Experiences (ACEs) study and learn more about resilience.

**VISIT US AT:  
<http://maineaces.org/>**

# MRBN CHAMPIONS



**Frances Hollis Brain Foundation**



**MAINE DEVELOPMENT FOUNDATION**



*The Voice for Early Childhood*



# Vision Statement

*To promote resilience in all people by increasing and improving our understanding of traumas and stressors such as Adverse Childhood Experiences (ACEs), as well as protective factors and why they matter.*

*We aim for a comprehensive, systematic approach to fostering education, awareness and action. We strive to assure that conversations are safe, productive and impactful.*



# Opportunities

- ACEs and Resilience Presentations/Professional Development Workshops ranging from Grand Rounds (45 minutes) to 6.5 hour Intensives
  - Moving to CEU/CME credited opportunities
- On-site, phone and e-mail Technical Assistance to support ACEs-related initiatives, resilience promotion, teaming, etc.
- Bi-weekly Resources and Good Reads
- Facilitated access to national resources, in-state opportunities and partners
- Quarterly MRBN Meetings – 5<sup>th</sup> Thursday of the month (when that occurs), usually held in Waterville 9:00 a.m. - 1:30 p.m.
  - Professional Development presentation
  - MRBN Updates, committee work and relevant information to our work
  - Networking with others from across the state



# Outreach/Engagement Efforts (as of 12/31/14)

- **Site Engagement/Outreach/Training Sessions (N=152)**
  - 2012 – 32 sessions conducted (8 months)
  - 2013 – 84 sessions conducted (12 months)
  - 2014 – 36 sessions conducted (12 months)
- **Technical Assistance Sessions (new in 2014) (N=34)**
  - 2014 – 34 sessions conducted
- **Research Collaboration**
  - Muskie School of Public Service
  - UMaine School of Social Work (Public School Survey)
  - Husson University (2014 Maine ACEs Survey student support)
- **National Consultation/Collaboration**

*5,347 Participants across all efforts  
2012-2014*



# Outreach/ Engagement Efforts

(Data as of 12/31/14)

- **ACEs Summits (N=14)**
  - **2013** (First ACEs Summit held in Auburn sponsored by CCCYF-TF; became the template for future MRBN sponsored/led Summits (April 12, 2013)
    - 6 ACEs Summits conducted over the remaining 8 months
  - **2014 – 12 months**
    - Seven (7) ACEs Summits conducted
- **“Bring It On” (BIO) Skill Building Sessions (N=6)**
  - **2014 – 12 months**
    - First scheduled for June 12, 2014 sponsored by the Penquis District Health Coordinating Council in Bangor/Brewer area
    - Five (5) “Bring It On” sessions delivered



Interested in learning more about the Maine Resilience Building Network? Check out our website: <http://www.maineaces.org/> and take a tour around to find resources and connections with others in Maine also interested in this work!



**Joy: A Subject Schools Lack**

Infusing the school day with play and fun may appeal to children's nature to help them learn. The author is a parent of three, a teacher and a developmental psychologist. She closes this article with this paragraph: "Joy should not be trained out of children or left for after-school programs. The more difficult a child's life circumstances, the more important it is for that child to find joy in his or her classroom." "Pleasure" is

**and Families Health Problems, Community**

will follow Monica resources that practitioners might find to the signals. Even more important, resources, and tips to come unity to need of resources responsive is its goal to respond fully as a committed



By joining MRBN, you asked for information regarding new research, upcoming events, and promising practices.

Welcome to the **Maine Resilience Building Network**



MRBN is a collective of individuals and organizations from throughout Maine. We focus on resilience in people and communities. Resilience is the ability to overcome stresses and adversity. Resilience is built through supportive relationships, positive experiences, and by learning skills. Resilience is unique in each person.

Welcome back to Resources and Good Reads, the newsletter of the Maine Resilience Building Network! On February 19, 1473, Nicolaus Copernicus is born in Torun, a city in north-central Poland on the Vistula River. The father of modern astronomy, he was the first modern European scientist to propose that Earth and other planets revolve around the sun. Why is this relevant to MRBN? See the answer below!



**COMMUNITIES ACROSS U.S. STRIDING DOWN ROAD TO RESILIENCE**

It's a stride, not a sprint, because becoming trauma-informed and building resilience is a long-term commitment, with — dare we say — bazillions of small steps on the way. We've done case studies of communities who started down the road a few years ago — Tarpon Springs, FL; Philadelphia, PA; The Dalles, OR; Camden, NJ; Walla Walla, WA; Iowa; Maine; Arizona; and Alberta, Canada. (If you want to read them all together, head to the Community Resilience Cookbook site.) This year, we'll be keeping close tabs on them and other communities that are new to the journey.

Check out the State stories!

SAMPLE RESOURCES AND GOOD READS: MAINE RESILIENCE BUILDING NETWORK



**Abandoned Kids See Changes in Brain Structure**

Moving children from institution to foster care seems to put development back on track. Children who experienced severe neglect as infants had compromised severe white matter integrity, but early intervention seemed to improve white matter growth, a prospective, randomized study found.

According to results from diffusion tensor imaging, significant associations emerged between neglect in early life and microstructural integrity of multiple areas of the brain, reported Charles Nelson, PhD, of Boston Children's Hospital, and colleagues.

**Have you signed up from the ACEs Conn**

**2015 Edition of Basic Facts about Low-**

The National Center for Children, Youth, and Families' series of Basic Facts about Low- and high-income children in the United States that appear to distinguish them from their counterparts. There are nearly 10 million children, 48% (11.1 million) live in poor families. The percentage varies by race/ethnicity. Basic Facts about Low- and High-Income Children (5)

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**Engage Parents by Acting With Empathy**

In the urban education environment in which I work, the relationship between parents and schools are problematic at best. In order for teachers to enter into productive relationships with school community members, they need an ability to cross boundaries into a state of empathy with their students and parents. Making this transition requires some attitudes that are not traditionally found in teacher preparation programs: including risk-taking perspective taking, and caring.

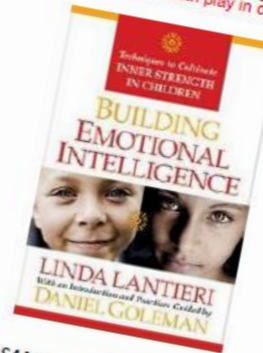
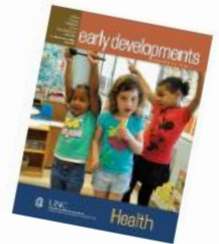
This is the third of a five-part conversation on how teachers can communicate effectively with parents. You can find the full series of articles [here](#).

**From the Winter 2015 issue of Early Developments: Health**

As the practice of medicine evolves to accommodate many interrelated components of health, FPG continues to study how mental and emotional health are nested within a constellation of factors that influence outcomes.

This work is highly varied, as evidenced by the two stories we spotlight here. The first story looks at the power of mindfulness to overcome physical and emotional effects of childhood adversity. The second looks at the needs of students with one of the most common mental health disorders—in particular, at the supports enabling low achieving students with attention deficit/hyperactivity disorder (ADHD) to enhance their chances for academic success.

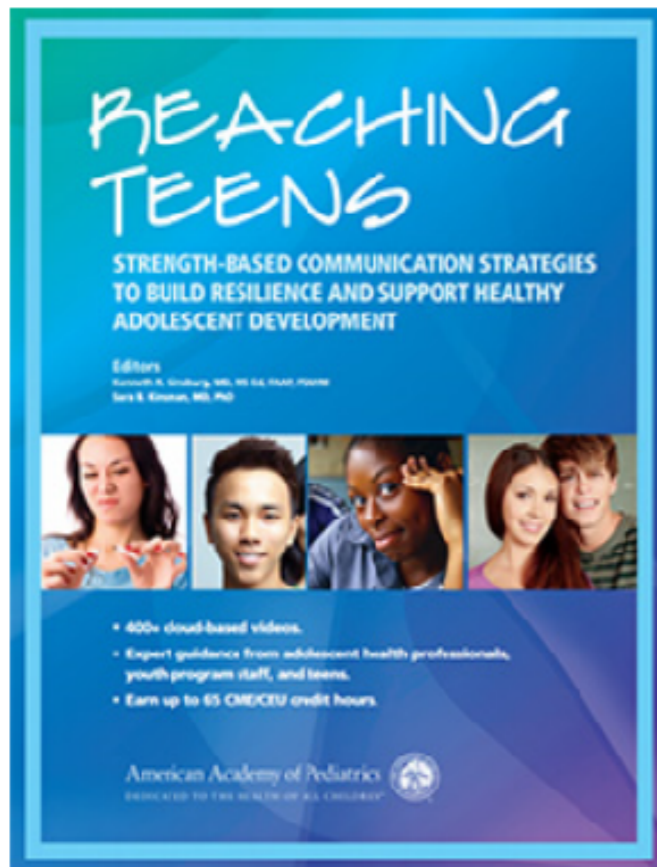
The content of FPG's work also encompasses depression, substance abuse, prejudice, relationships, and much more, addressing and unlocking the critical roles mental and emotional health play in child and adult lives.



**Stilling the Mind: An Interview with Linda Lantieri**

Teachers can create moments of calm in the midst of classroom bustle — and help students learn better. Do your students have difficulty focusing, remaining calm, or managing their emotions? Do many of them seem chronically stressed? A new book offers hope, bolstered by practical tips, for helping them overcome these problems. Being calm and paying attention are actual skills you can teach in the classroom, says Linda Lantieri, a twenty-three-year veteran of bringing social and emotional learning to New York City schools and a teacher for forty years. In her new book, *Building Emotional Intelligence: Techniques to Cultivate Inner*

SAMPLE RESOURCES AND GOOD READS: MAINE RESILIENCE BUILDING NETWORK



**Buy the Book:**

[AAP WEB PAGE](#)

[Amazon](#)

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Telling young people what not to do makes them aware of problems, but does little to create change. In fact, it engenders shame and can therefore backfire. An approach that addresses risk by building on the strengths of youth promotes positive changes by building young people's confidence and helping them understand how much they matters. Youth who understand that others expect the best from them gain self-worth and are poised to *THRIVE*.

### Reaching Teens:

- Is a comprehensive body of work that prepares professionals TO APPLY the principles of positive youth development and resilience to guide youth towards healthy behaviors and wise decisions.
- Is theoretically-rooted and evidence-Informed. It is guided by experts with decades of youth-serving experience and infused with the voice of teens.
- Has 69 chapters which offer strength-based, trauma-informed communication strategies on building trustworthy relationships, working with parents, addressing stress and its behavioral and mental health outcomes, and approaching specific "risk behaviors." Concluding chapters address professional longevity, offer strategies to stem burnout, and prepare us to serve over a lifetime.
- Includes 445 cloud-based films that share professional and youth wisdom and offer demonstrations of key concepts.
- Offers health professionals 65 CME hours from The American Academy of Pediatrics.
- Offers youth serving professionals 65 credits from the National Board of Certified Counselors and 60 CEU hours from The National Association of Social Workers.
- Offers suggested group learning and discussion strategies in each chapter because learning is best reinforced in the setting it is to be applied.

This body of work has been thoughtfully priced so that it can be accessible to all youth serving professionals and agencies.

Contact the American Academy of Pediatrics at [aapsales@aap.org](mailto:aapsales@aap.org) to explore multiple electronic copies or licensing the product for your institution.

# Three Levels of Stress

(Examples:  
Starting a new  
school, getting a  
vaccination)

## Positive

Brief increases in heart rate,  
mild elevations in stress hormone levels.



(Examples:  
Frightening injury,  
natural disaster)

## Tolerable

Serious, temporary stress responses,  
buffered by protective relationships.



(Examples: Exposure to  
violence,  
physical or emotional  
abuse or neglect,  
caregiver substance  
abuse or mental illness)

## Toxic

Serious, prolonged elevated stress  
responses, in the absence of  
protective relationships.



[http://developingchild.harvard.edu/resources/multimedia/videos/inbrief\\_series/inbrief\\_impact\\_of\\_adversity/](http://developingchild.harvard.edu/resources/multimedia/videos/inbrief_series/inbrief_impact_of_adversity/)  
[http://developingchild.harvard.edu/topics/science\\_of\\_early\\_childhood/toxic\\_stress\\_response/](http://developingchild.harvard.edu/topics/science_of_early_childhood/toxic_stress_response/)

# Ten Adverse Childhood Experiences (ACEs)(<age 18)

## Abuse

- Physical Abuse
- Sexual Abuse
- Psychological Abuse

## Household Trauma

- Repeated losses of caregivers
- Domestic violence
- Family member incarcerated
- Witness to parental abuse
- Familial substance abuse or mental illness

## Neglect

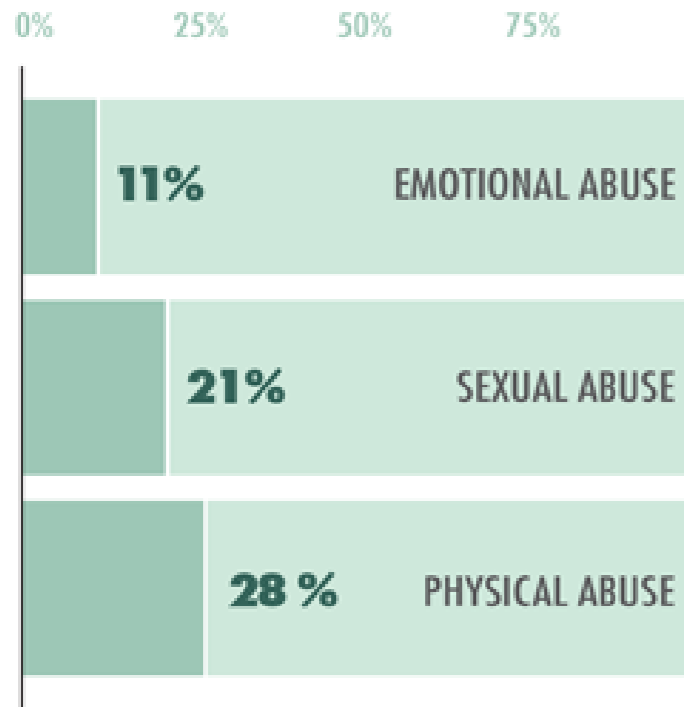
- Physical neglect
- Emotional neglect



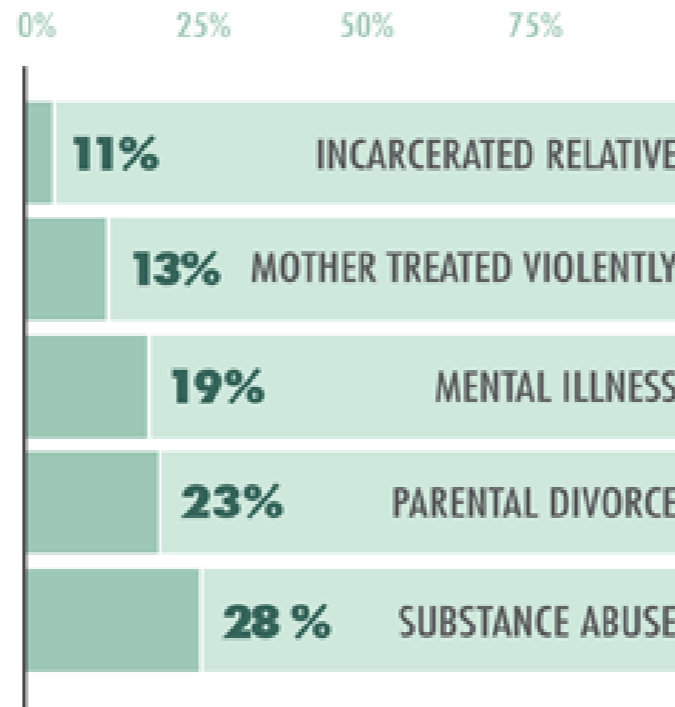
# Infographic Snapshot



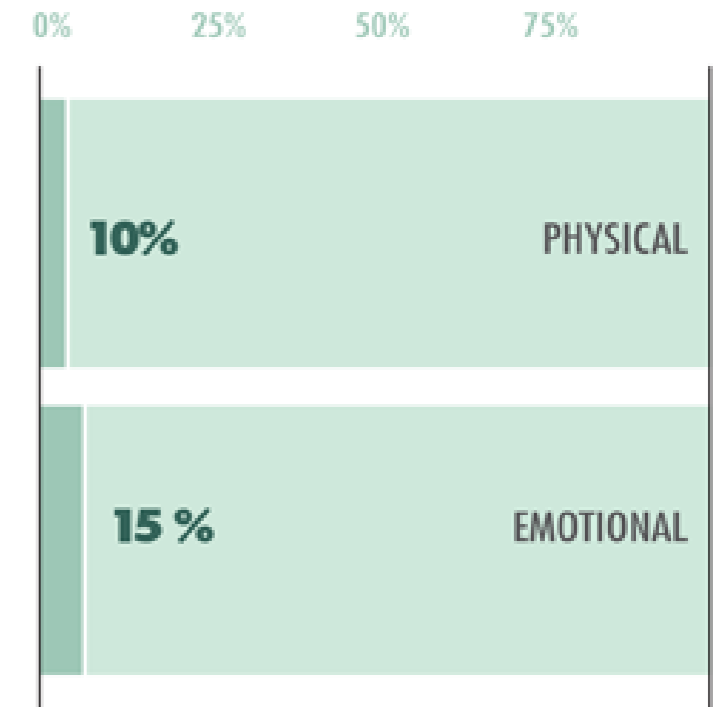
## ABUSE



## FAMILY DYSFUNCTION



## NEGLECT



[http://vetoviolence.cdc.gov/childmaltreatment/phl/resource\\_center\\_infographic.html](http://vetoviolence.cdc.gov/childmaltreatment/phl/resource_center_infographic.html)

# ACEs Are Universal



- Equal Opportunity Experience
  - Crosses all economic groups
- ACEs like company
  - If *any* one ACE is present, there is an 87% chance *at least* one other ACE category is present, and a 50% chance of 3 others
  - *Women are 50% more likely than men to have an ACEs score >5*

# Measuring ACEs: Two Important Points

- *Volume*
- *Velocity*
- *Redundancy*

**Finding Your ACE Score**

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While you were growing up, during your first 18 years of life:

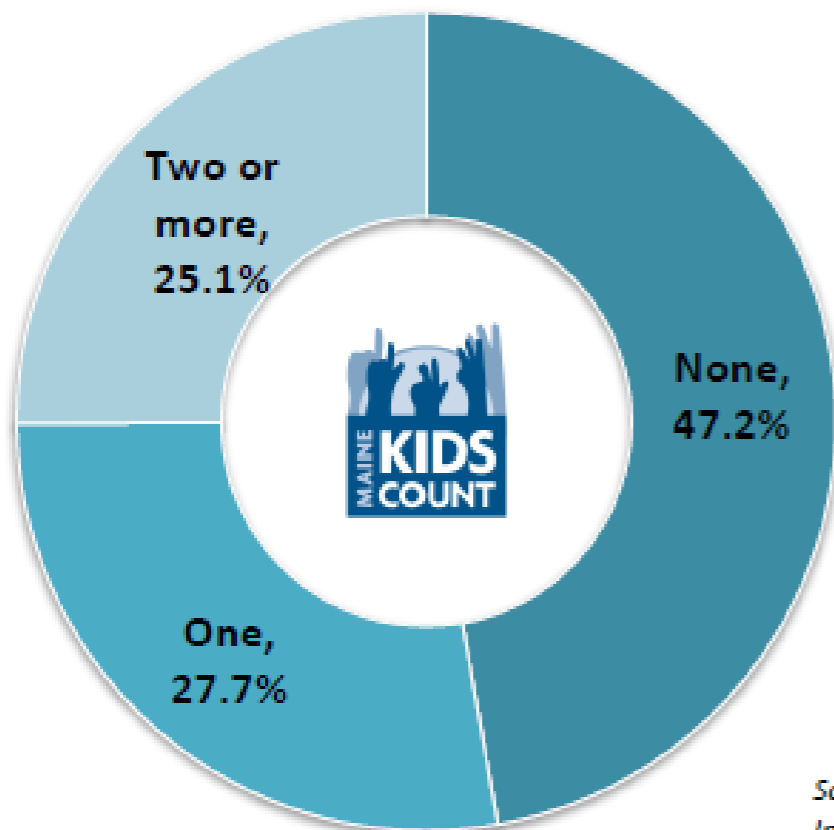
1. Did a parent or other adult in the household **often** or **very often**...  
Swear at you, insult you, put you down, or humiliate you?  
or  
Act in a way that made you afraid that you might be physically hurt?  
Yes      No      If yes enter 1 \_\_\_\_\_
2. Did a parent or other adult in the household **often** or **very often**...  
Push, grab, slap, or throw something at you?  
or  
Ever hit you so hard that you had marks or were injured?  
Yes      No      If yes enter 1 \_\_\_\_\_
3. Did an adult or person at least 5 years older than you **ever**...  
Touch or fondle you or have you touch their body in a sexual way?  
or  
Attempt or actually have oral, anal, or vaginal intercourse with you?  
Yes      No      If yes enter 1 \_\_\_\_\_
4. Did you **often** or **very often** feel that...  
No one in your family loved you or thought you were important or special?  
or  
Your family didn't look out for each other, feel close to each other, or support each other?  
Yes      No      If yes enter 1 \_\_\_\_\_
5. Did you **often** or **very often** feel that...  
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?  
or  
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?  
Yes      No      If yes enter 1 \_\_\_\_\_
6. Were your parents **ever** separated or divorced?  
Yes      No      If yes enter 1 \_\_\_\_\_
7. Was your mother or stepmother:  
**Often** or **very often** pushed, grabbed, slapped, or had something thrown at her?  
or  
**Sometimes, often, or very often** kicked, bitten, hit with a fist, or hit with something hard?  
or  
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?  
Yes      No      If yes enter 1 \_\_\_\_\_
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?  
Yes      No      If yes enter 1 \_\_\_\_\_
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?  
Yes      No      If yes enter 1 \_\_\_\_\_
10. Did a household member go to prison?  
Yes      No      If yes enter 1 \_\_\_\_\_

Now add up your "Yes" answers: \_\_\_\_\_ This is your ACE Score.

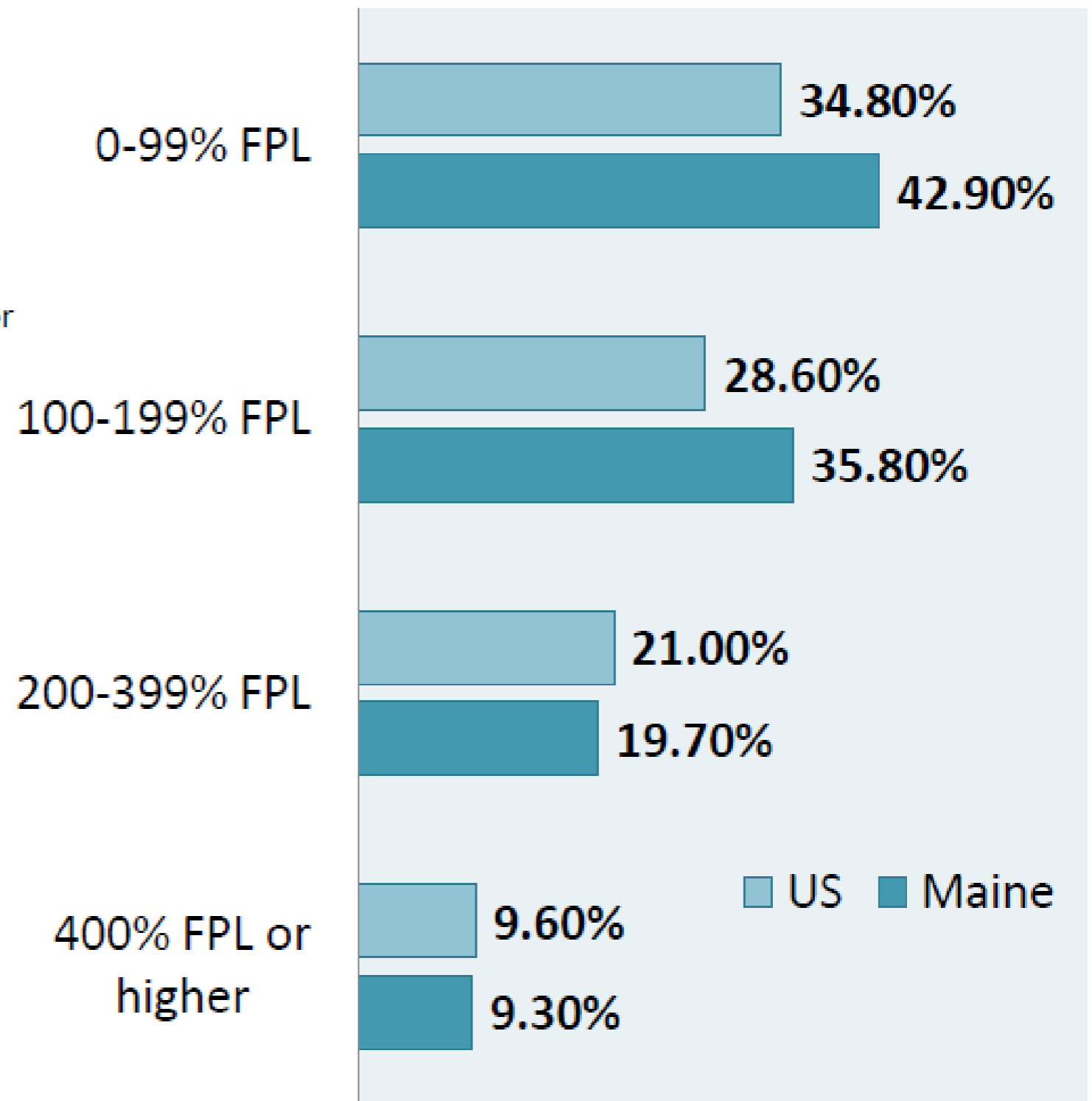
**Almost 53% of Maine children have experienced at least one of the following adverse experiences:**

- socioeconomic hardship
- divorce/separation of parent
- death of parent
- parent served time in jail
- witness to domestic violence
- victim of neighborhood violence
- lived with someone who was mentally ill or suicidal
- lived with someone with alcohol/drug problem
- treated or judged unfairly due to race/ethnicity.

**One in four Maine children have had two or more adverse experiences.**



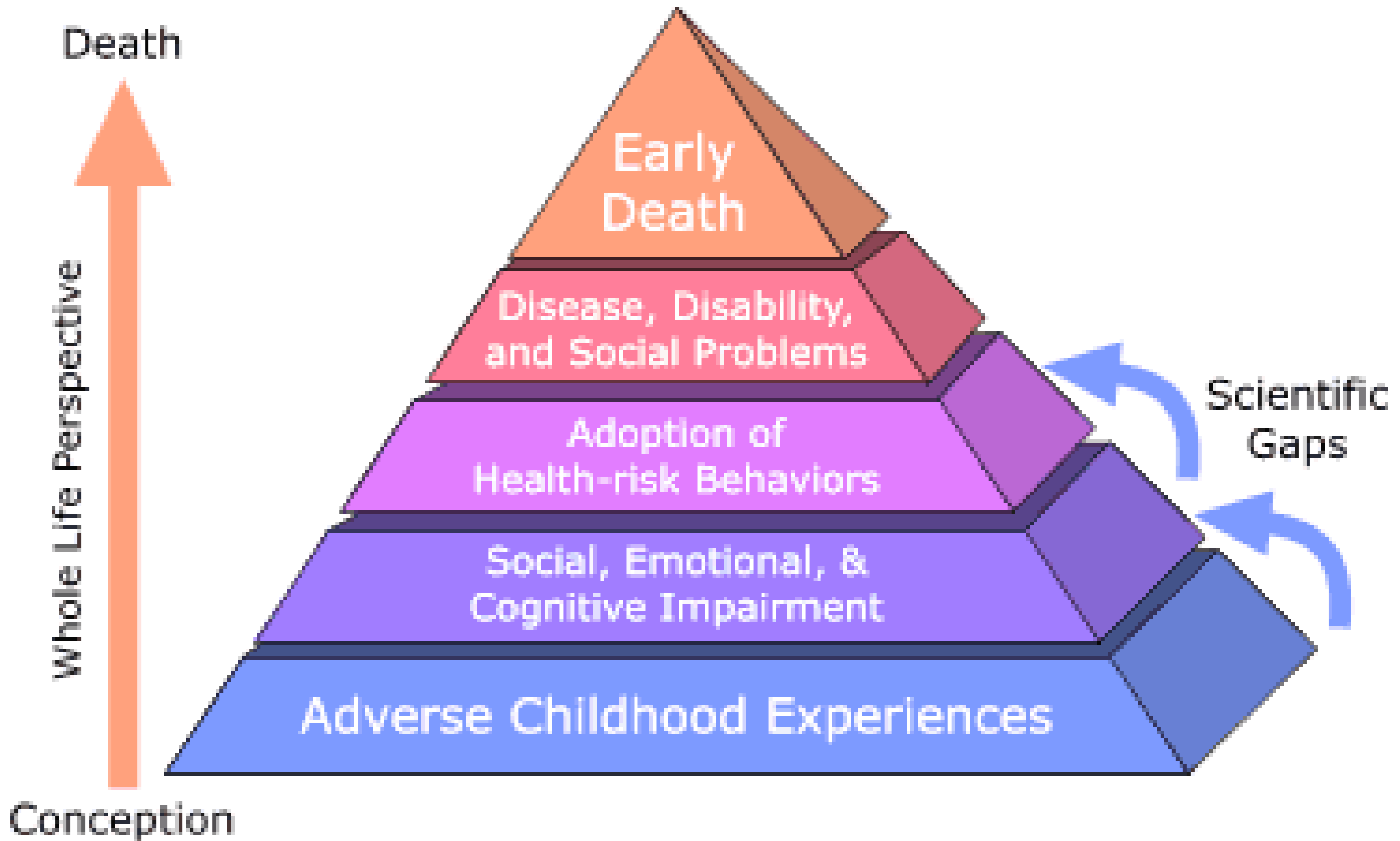
**Children in Maine & US with two or more adverse experiences by family income level**



FPL=Federal Poverty Level

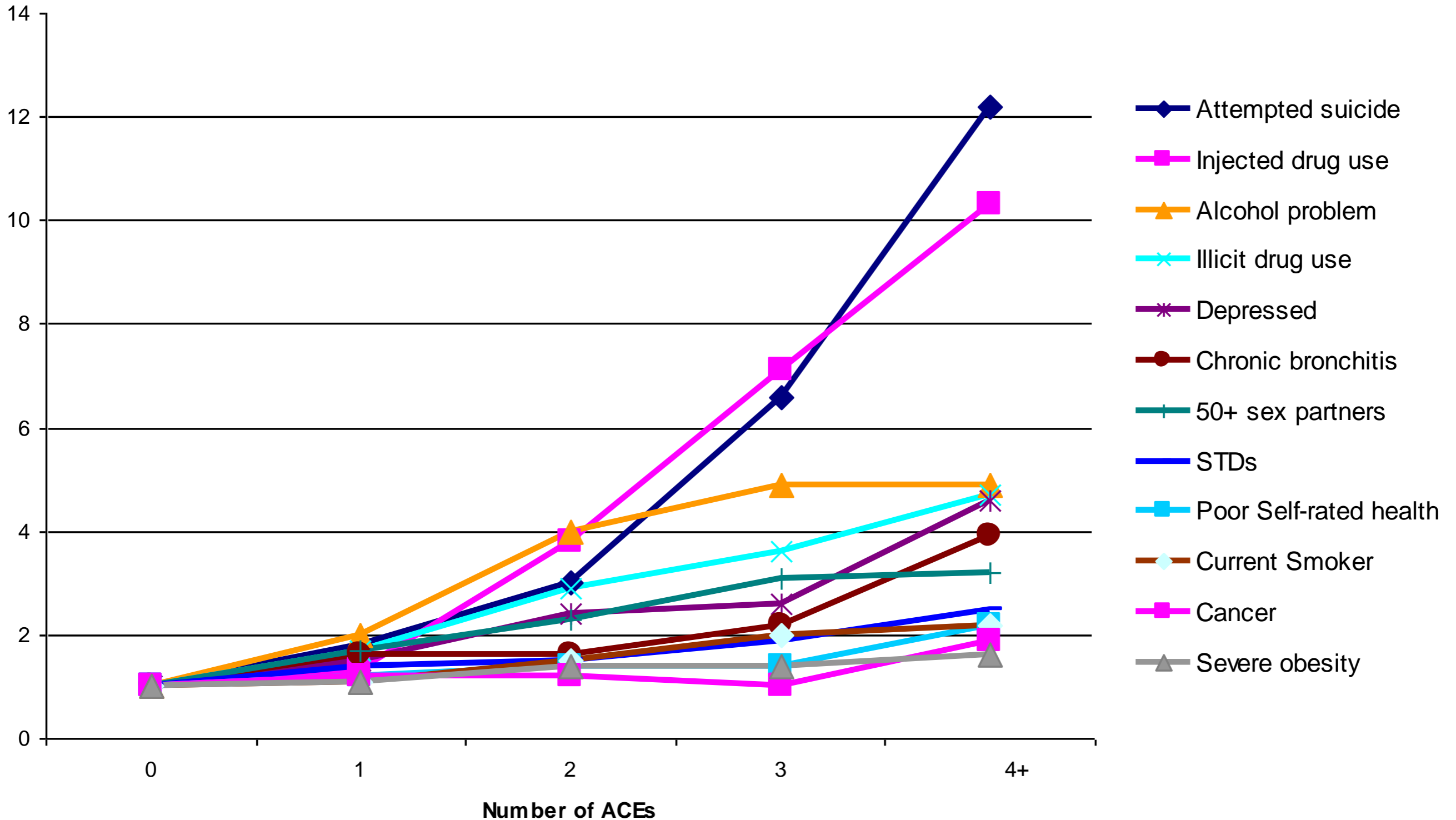
In 2012, the FPL for a family of 4 (2 adults/ 2 children) was \$23,383.



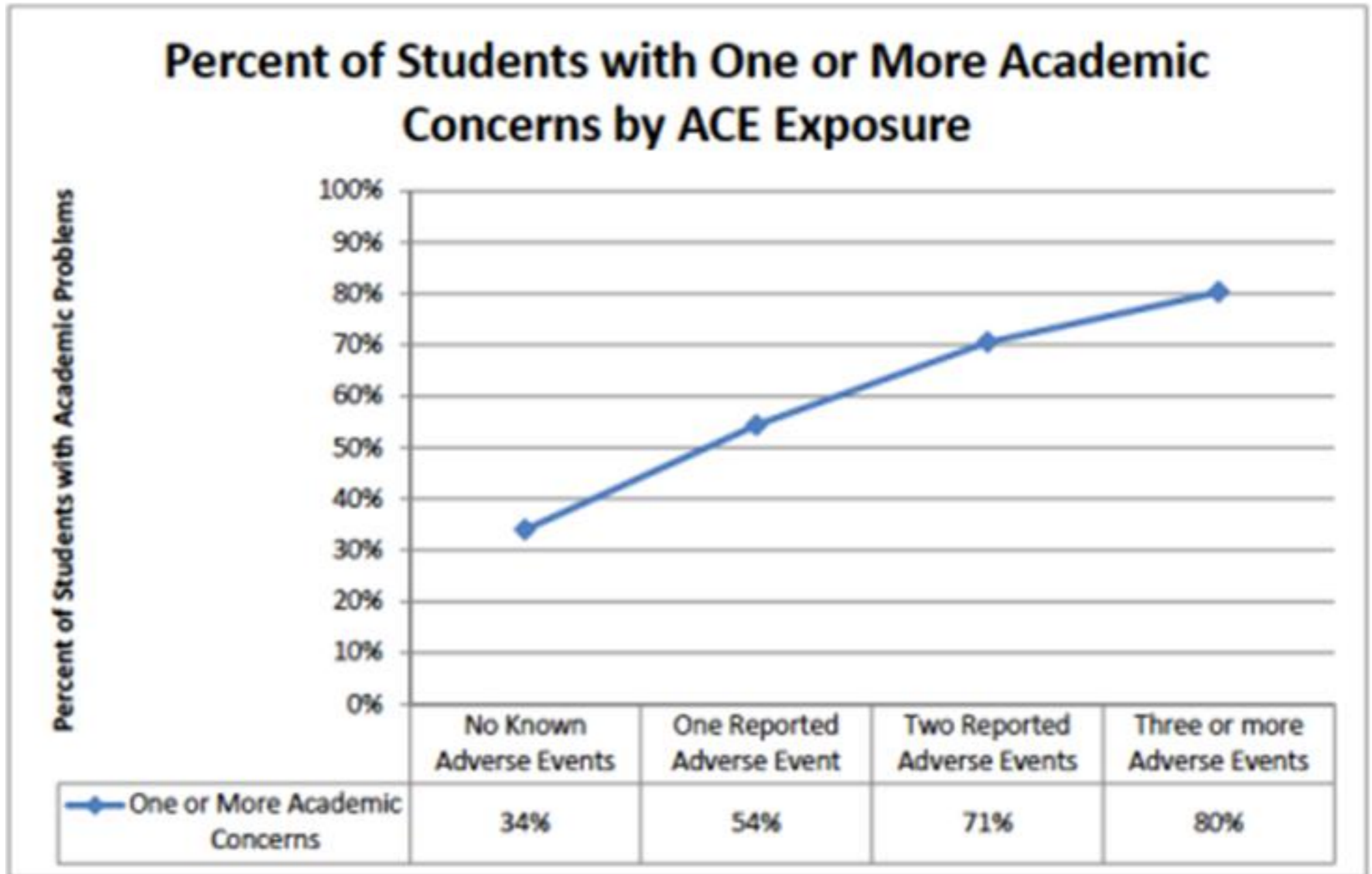


# Cumulative ACEs increase the risk of negative outcomes:

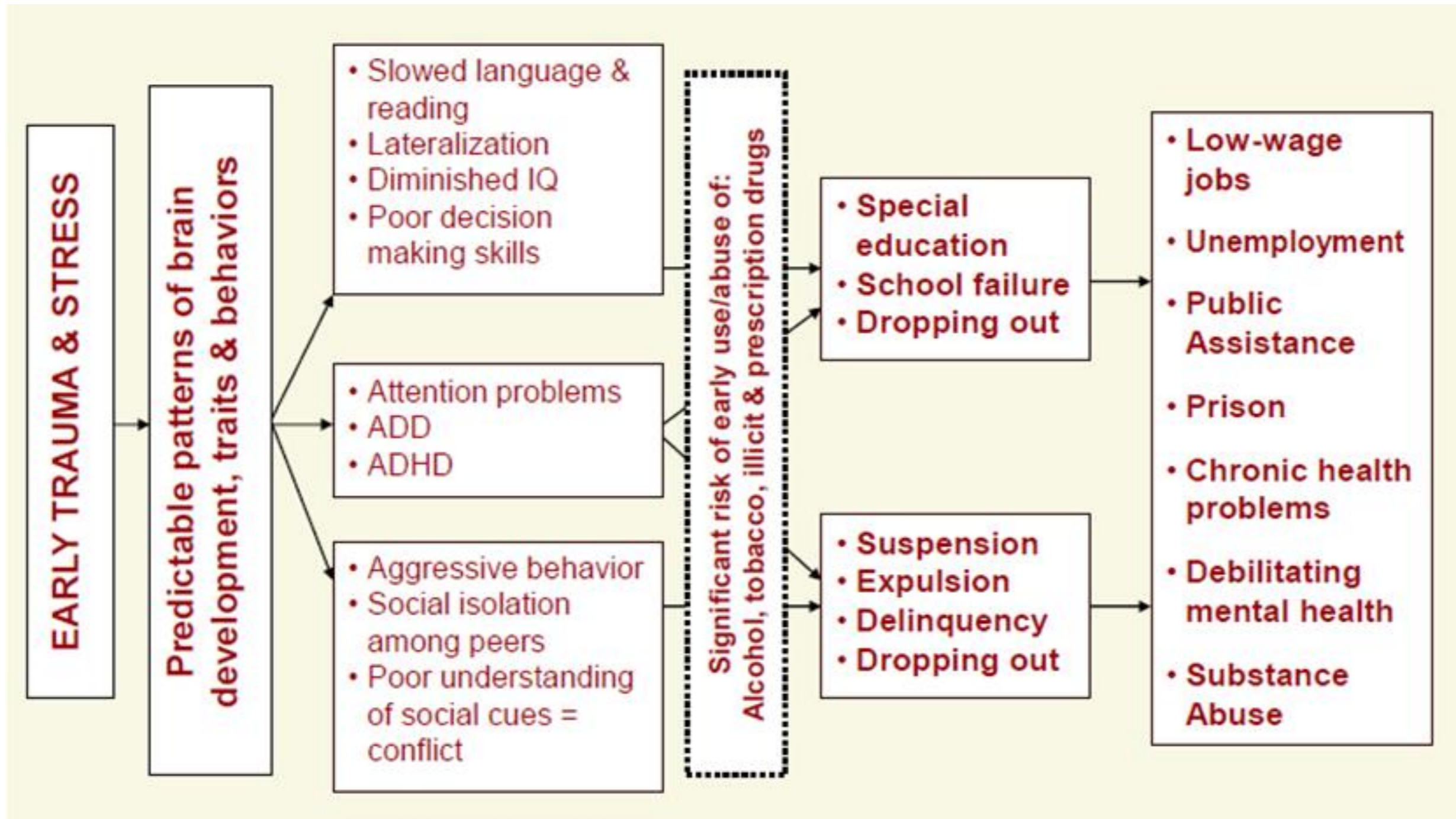
## ACE Study Odds Ratios



# ACEs and Academics



# ACEs: The Fast Track to Poverty



# Why is This Important?

## Because ACEs are:

- Surprisingly common
- Often the basis for many common public health problems
- Strong predictors of later social functioning, well-being, health risks, disease and early death
- Costly to society in financial and HUMAN terms

*This combination of findings makes ACEs one of the leading, if not THE leading determinant of the health and social well-being of our nation.*  
*Centers for Disease Control (CDC)*

# PROBABILITY OF SAMPLE OUTCOMES GIVEN 1,000 AMERICAN ADULTS

**330 (33%)  
Report No ACEs**



**WITH 0 ACEs**  
1 in 16 smokes (20)  
1 in 69 are alcoholic  
1 in 480 uses IV drugs  
1 in 14 has heart disease  
1 in 96 attempts suicide

**510 (51%)  
Report 1-3 ACES**



**WITH 3 ACEs**  
1 in 9 smokes  
1 in 9 are alcoholic  
1 in 43 uses IV drugs  
1 in 7 has heart disease  
1 in 10 attempts suicide

**160 (16%)  
Report 4-8 ACEs**



**WITH 7+ ACEs**  
1 in 6 smokes (27)  
1 in 6 are alcoholic (27)  
1 in 30 use IV drugs (50)  
1 in 6 has heart disease  
1 in 5 attempts suicide

# So, what makes the difference?



- Not everyone with ACEs experiences negative outcomes
- Would/could we prevent bad things from happening in the first place?
- Bothered vs. Not Bothered?
- Role of resilience in becoming “not bothered”





# Definition of Resilience

*Resilience is the ability to work with adversity in such a way that one comes through it unharmed or even better for the experience. Resilience means facing life's difficulties with courage and patience – refusing to give up. It is the quality of character that allows a person or group of people to rebound from misfortune, hardships and traumas.*

**Resilience is rooted in a tenacity of spirit—  
a determination to embrace all that makes life worth living  
even in the face of overwhelming odds.**

*Much of our resilience comes from community—  
from the relationships that allow us to lean  
on each other for support when we need it.*



# VIGNETTE – PART 1

Mary had called with a request for ADHD medication for her four year old son, Jimmy, because his preschool had been sending notes home about his rough, reckless and sometimes dangerous behavior. Recently, there was warning that he might be unable to continue there if his behavior didn't improve. She arrived with Jimmy and her 18 month old daughter, Rinnai, who was fussy and clingy and a distraction to Mary's attention to doctor and Jimmy. Mary apologized that she hadn't been able to find anyone to babysit Rinnai and she had thought it would have worked to bring her because, usually, Rinnai was very quiet and easy to manage. Past history and the two previous well-child visits since Mary transferred to the practice had been unremarkable.

# Next Steps?

- "Surveillance" suggests...?
- Next steps clinically?
- Question? "Have there been any stressful events, since the last visit?"

# VIGNETTE – PART 2

- Mary reported that she and her husband had separated .... Weeks ago. Jimmy was asking about him and complaining that daddy's rules weren't as mean as hers. Rinnai seemed less withdrawn, but this was a challenge to respond to in the midst of chaos. Bedtime routine had been upset because Mary worked into the evening waitressing and dad was no longer available to put kids to bed. They usually went to her mother's home to sleep and Mary picked them up in the morning. Dad was going to court to seek visitation.

# Next Steps...

- Screening for cumulative risk (other stresses beyond separation?)
- Screening for protective factors
- Using screening to plan next steps, e.g.; Developmental guidance, motivational interviewing re: goals and planning, specific skill building, referral for onsite or offsite behavioral health,
- Support for protective factors, recommendations, referrals

# Cumulative Risk

- Screening for exposure to adversity indicated that in addition to parents' separation, the children had experienced father physically assaulting mother, alcohol abuse by both parents, and a two month incarceration of father for one of the domestic violence incidences.
- Following up how this may have affected the children. Mary described Rinnai as tending to "freeze" when parent conflict escalated, alert and watchful but very passive and unresponsive. This occurred less frequently since separation, but she was more clingy and seemed to have regressed in independence and language.
- Jimmy had become much more demanding and aggressive in his father's absence. Both children were more difficult to get to sleep and average two hours of sleep less than before,

# Protective Factors / Resilience

- Social supports (no longer has support from in-laws for child care) hasn't made new friends outside of work or connected with other parents.
- Access to services. Unsure how to manage court and visitation issues. Good relations with child care services have been strained by Jimmy's behavior. Keeping up with well child care.
- Skills / knowledge re child needs (relate to understanding of KidsFirst recommendations, maintaining a familiar routine, soothing child stress, etc.)
- Parental resilience (ACE score of 6 and 3 still bother/ 3 have been mastered, coping skills, complicating factors with DV triggering memories from childhood, etc.)
- Child resilience factors. Like books, Jimmy enjoys school and had done well in past.

# Health Care Issues

- How to introduce questions regarding stresses?
- Steps in responding to ADHD medication request
- Impact of sleep deprivation and hygiene
- Sympathetic / parasympathetic responses
- Primary care in relation to other systems, education, court, community and family resources, etc.
- Etc.