

Preventing Early Childhood Adverse Experiences: Integration of home based early intervention and home visiting

andrew hsi, md, mph

27 july 2017

60th Annual Family Medicine Seminar

NM Academy of Family Physicians

ahsi@salud.unm.edu

Objectives for Presentation

At the end of the presentation, the distinguished audience members will:

- Understand types of Adverse Childhood Experiences (ACEs)
- Describe the prevalence of ACEs in New Mexico
- Identify ACEs in primary care practices
- Develop collaborations with early intervention programs as upstream interventions
- Advocate for home visiting services
- Organize 2-generation approaches to upstream primary care

Disclosures: no conflicts of interest

No patients depicted in presentation

What Do We Know About ACEs?

Abuse of Child

- Emotional
- Physical
- Sexual

Household dysfunction

- Exposure to substance abuse
- Parental mental illness
- Violence against mother
- Parent incarcerated
- Loss of biological parent

What is the relationship between experiences of childhood abuse and household dysfunction and health risk behaviors and diseases in adults?

How Many Affected by ACEs in Study?

Prevalence of Childhood Events for Insured Adults in Kaiser	
Childhood psychological abuse	11%
Childhood physical abuse	11%
Childhood sexual abuse	22%
Family member abused alcohol or drugs	26%
Loss of biological parent	22%
Family member mentally ill or suicidal	19%
Violence directed against the child's mother	13%
Family member imprisoned	4%
Parents ever separated or divorced	23%

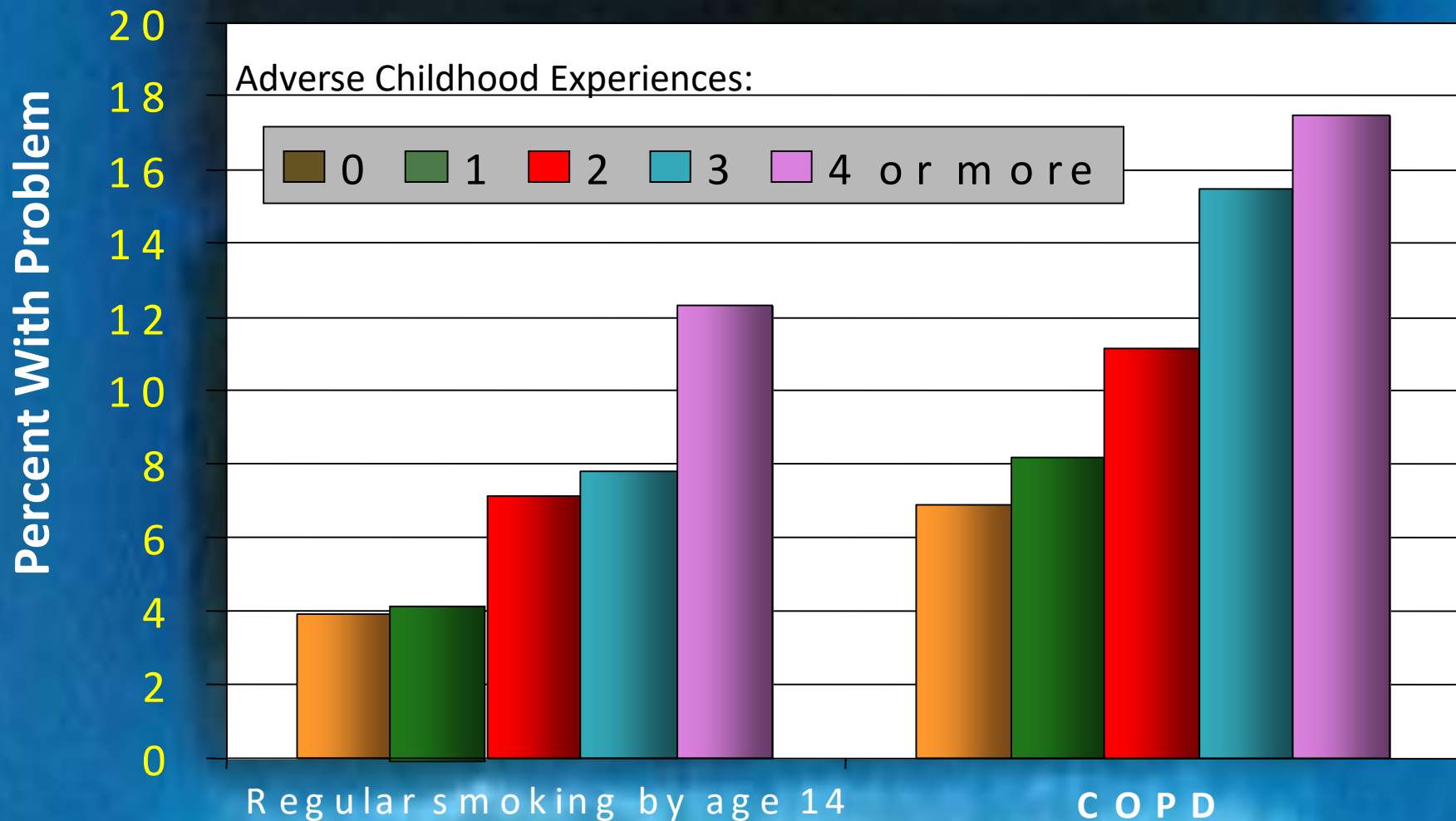
ACEs Are Stressors That Produce Risk Behaviors

**Risk behaviors leading to
decreased “health outcomes”
and early chronic illnesses in
adult life**

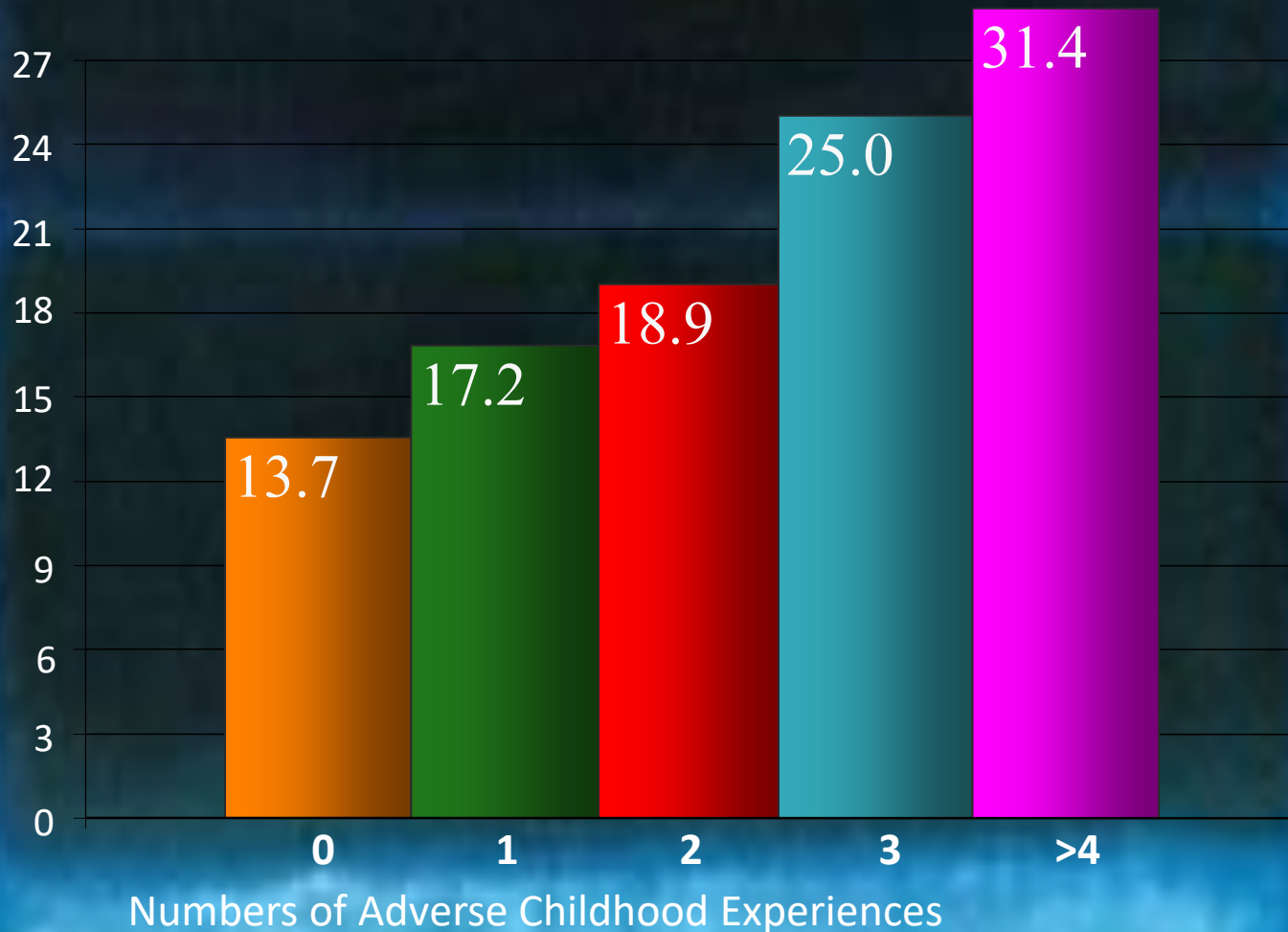
Watering Hole



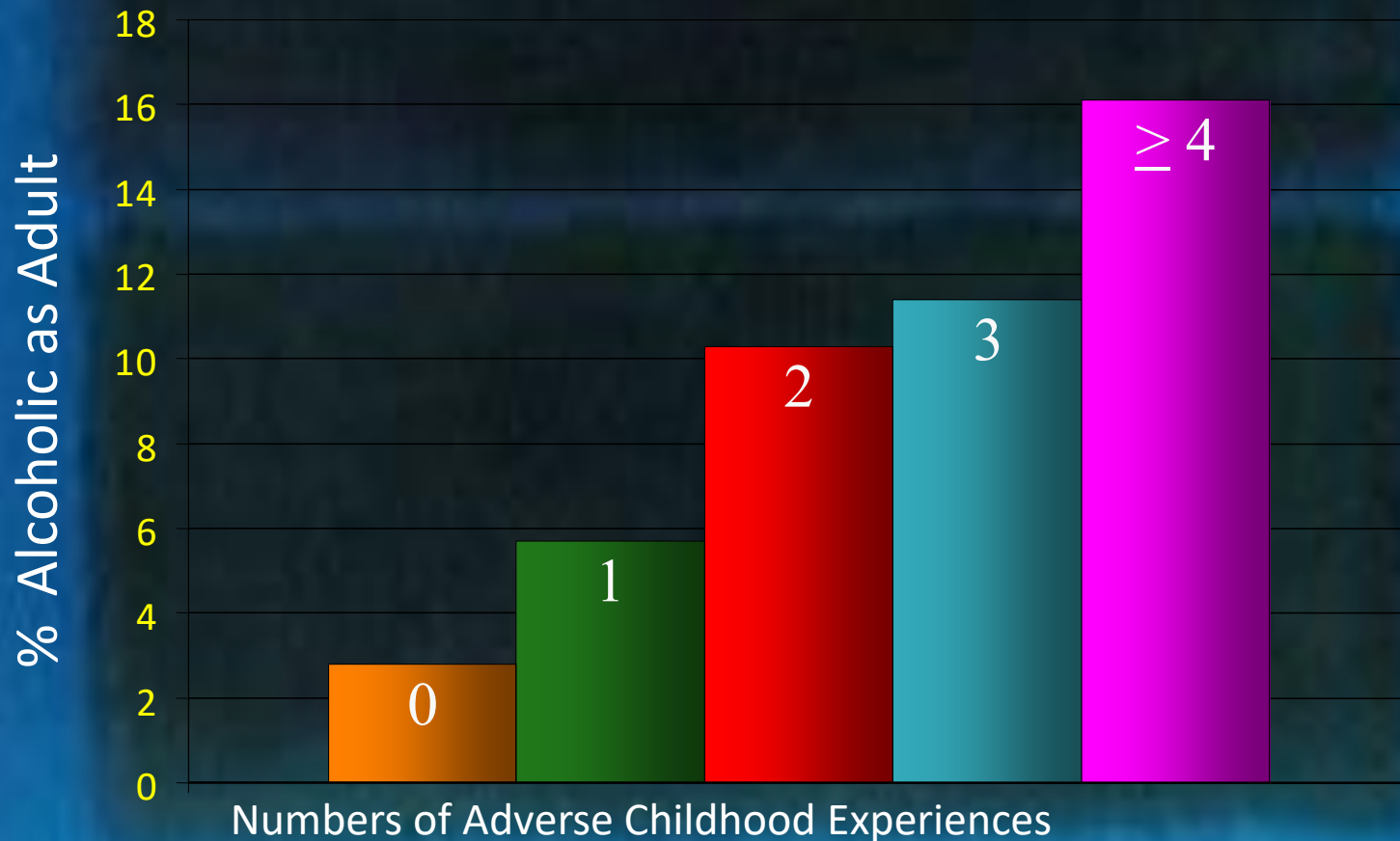
Self-Reported Early Smoking and Chronic Lung Disease



5 Times Greater Risk Initiation of Alcohol Use By Age 14, 1962-78



Adverse Experiences and Adult Alcoholism



Relative Risks of Lifetime Health Behaviors Associated with Risks for Early Death



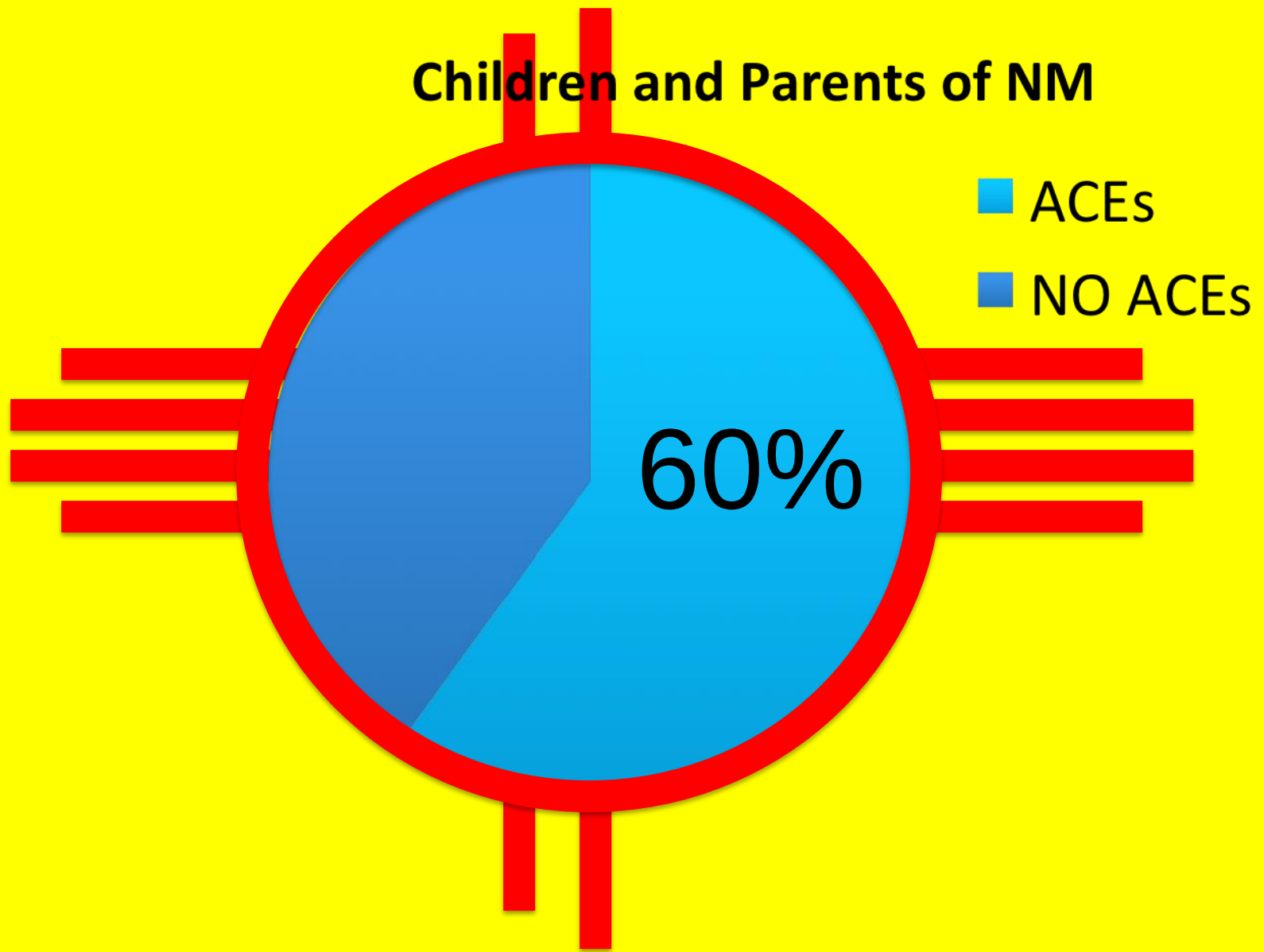
ACE score	Alcoholism	IV Drug Abuse	Attempted Suicide
0	1.0*	1.0*	1.0*
1	1.9	1.0	1.8
2	2.1	2.5	4.0
3	2.7	3.5	4.0
4	4.5	3.8	7.2
≥5	5.1	9.2	16.8

* 0 adverse events set as standard risk

CDC Morbidity & Mortality Weekly Report (MMWR)

- 2010 CDC survey of ACEs from five different states: NM, TN, WA, AR, LA
- 26,229 respondents:
 - 59.4% had experienced at least one ACE
 - New Mexico: 16% with 4 or more ACEs
 - Highest prevalence of physical abuse (19.5%)
 - Violence directed against a maternal parent (18.9%)

Children and Parents of NM

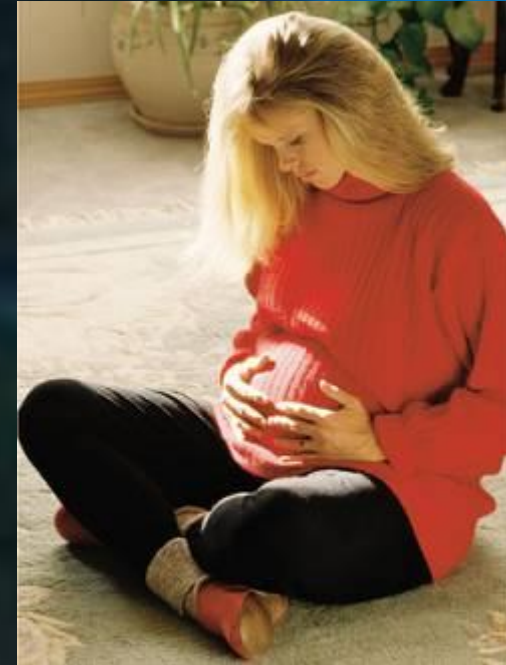


ACEs create Toxic Stress

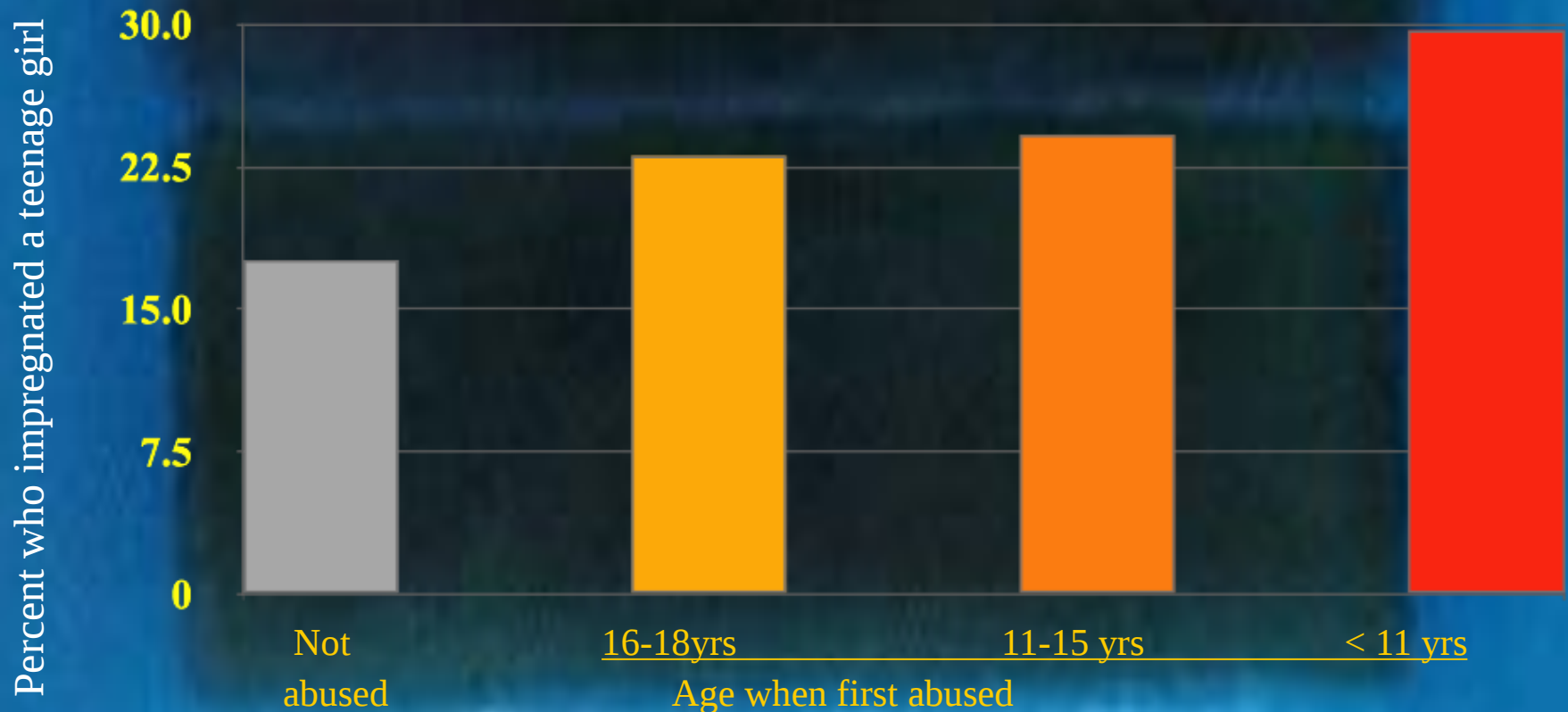
4 or More ACEs

Causes Toxic Stress Responses as Risk Behaviors

- **Risks 2 to 10-fold greater than 0 events**
 - Pregnant as teen, fathering as teen
 - 34.2/1000, rank 50th in US 2015
 - 17.1/1000 girls 15-17 years (2x US rate)
 - Depression
 - Smoking and lung disease
 - Lack of physical activity
 - Poor health by self-evaluation
- **Burden results in epigenetic changes in stress responses**



Likelihood of Impregnating a Teen Girl by Age of Sexual Abuse of Males



Identify ACEs in Practice

- **Rationale; why screen if can't change problems?**
- **Example; asking about teen sexual activity**
 - Teen birth rate in NM decreased 42% 1998-2011
 - Abortions to teens decreased 68% 1998-2011
 - CO 50% decrease in teen births*
 - Takes too much time to screen
 - Implementation of free screening instrument
- **No place to send families to for help**
 - Early intervention and home visiting

*CO Family Planning Initiative

Instrument for Screening

- **Survey of Well-Being of Young Children**
 - www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview.aspx
 - Free instruments, range 2-60 months
 - Assess child development, screen for autism
 - Assess family questions, substance use, violence
 - 15 minutes to complete
 - Training manual for scoring
 - Covered service for EPSDT



Other Approaches

- **Young Children and Adolescents**
 - Several potential instruments; most free
 - AAP Guidance to screen in practice
 - General open ended questions when:
 - Has your family life changed in any way?
 - Are there behavioral problems that worry you?
 - Directed questions when
 - Behavioral problems
 - School problems
 - Trauma informed anticipatory guidance

The Medical Home Approach to Identifying and Responding to Exposure to Trauma,
American Academy of Pediatrics 2014;
www.aap.org/en-us/Documents/ttb_medicalhomeapproach.pdf

Collaborations with Early Intervention Programs



- **Family Infant Toddler Program**
 - Developmental problems
 - Children 0 to 3 years
 - Diagnoses covered
 - Risk for disabilities; drug exposure
 - Developmental delays; CP
 - Reaches every county
 - Home visiting interventions
 - Demonstrating support for child

Neonatal Opioid Withdrawal Syndrome

Video clip from [newborns.stanford.edu/
newborns.stanford.edu/PhotoGallery/Jittery1.html](http://newborns.stanford.edu/newborns.stanford.edu/PhotoGallery/Jittery1.html)

Jittery baby
Withdrawal



Drug Exposure May Affect Developmental Tasks for Young Child

- Child whose parent uses substances
- Potential source of toxic stress
- Adequate parenting means changes
- With good early intervention support
 - Catch up growth
 - Overcome high tone
 - Help parent & child emotionally regulate
 - Demonstrate ways of handling infant



Role of Community Home Visiting

Programs in NM Communities

Potential Prevention of ACEs

Effects of Developmental Delays in Families

Risks of Delay; Expressive Language



- **El support for parent**
- **Sequence speech sounds**
- **Help speech production**
- **Interpret family routines**
- **Form emotional bond**
- **Modify parent style**
 - More open end questions
 - Specific praise more often
 - More different words in home

Home Visiting Programs NM

- **CYFD Report 2016**
 - 30 Programs
 - 28 counties served
 - 2,738 families seen
 - 47,000 home visits
- **Home grown program**
- **Programs differ for enrollment**
 - Prenatal enrollment prioritized
 - First child born in families
 - Voluntary enrollment
- **Staff types differ by program**
 - 33% with bachelor's degree
 - 15% master's degree
 - 16% associate's degree
 - 27% high school diploma



Services from Home Visiting

- Improve pregnancy outcomes, reduce preterm
- Promote positive parenting practices
- Build healthy parent-child relationships
- Children ready for schools
- Screen children for development at higher rates
- Families connected for formal & informal supports

Health Services Supported for Children

- **Improve infant-child health**
 - More completed well child exams
 - Completion of required shots by age 2
- **Screen for development problems**
 - Refer for delays in children's cognition
 - Refer for delays in physical development
- **Prevent child maltreatment**
 - Decrease % children referred for investigation
 - Reduce high risk behaviors in parents

Home Visiting Models; Nurses

- Nurse Family Partnership
- South Valley Bernalillo County

“She used to tell me all the time
I was a survivor,” Amanda describes
Valerie, her nurse home visitor.
“She really believed in me.”

» click to read Amanda's story



<http://www.nursefamilypartnership.org>

History of 2-Generation Model of Home Visiting Linked to Primary Care

Inventing Integrated Early Intervention With Medical Home

- **1989; infants with prenatal drug exposure**
 - Clear risks for neglect and abuse
 - No coordinated prenatal care
 - Mothers with limited access to drug treatment
 - Hospital nurses made some home visits
 - No coordinated medical services for infants
 - Limited interaction with child protection

Problems and Solutions

- **5-20% of women used drugs/alcohol in pregnancy**
- **Wrote pediatric part of MILAGRO grant**
 - Grant funded through SAMHSA
 - Comprehensive prenatal care through UNM OB started
 - Drug treatment at UNM Psychiatry CASA Program
 - Pediatric rooming in for infants with NAS (not funded)
 - Early intervention planned at Peanut Butter & Jelly

New Problems to Solve

- **Obstetrics & Psychiatry; not child focused**
 - Early intervention done at centers, barriers to services
 - No easy way of making appointments for babies
 - No ongoing care after delivery for mothers
- **Some women homeless after delivery**
- **Co-existing mental illness**
- **Inadequate parenting skills**

Solutions for Infants

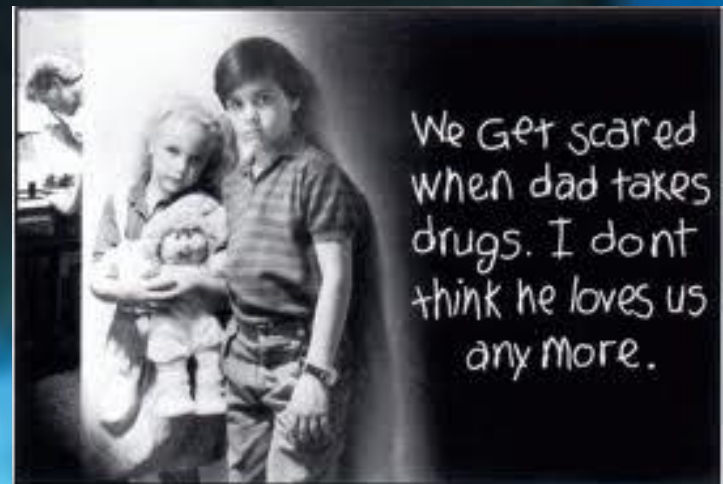
- **1990 received Los Pasos award (now FOCUS)**
 - Home based early intervention created
 - Funded positions at CYFD to share child protection
 - Community early intervention program staff funded
 - Hospital newborn follow up clinic started
- **Avert ACEs by closely supporting mothers**
- **Interdisciplinary teams built**
- **1992 began primary Los Pasos clinics for infants**

How to Prevent of ACEs

- Provide treatment for parents using drug
- Reduce risks of partner violence
- Facilitate access to mental health care
- Model adequate and appropriate parenting
- Create personal engagement with team
- Partner with parents around child development
- Solution focused question
- “What do you want for your child’s life?”

Parents with ACEs Need Developmental Home Visiting Like FOCUS

- **Home visiting based early intervention services**
 - Model understanding infants' cues directed to parents
 - Demonstrate how infants express needs to her parents in infancy
 - Focus on early language development before age 3
 - Emphasize building critical thinking through play with family support
 - Provide ideas on how to praise young child, positive attention
- **Access to comprehensive adult drug treatment**
- **Develop community health workers**
- **Prevent ACEs in family**



Programs Directed at 2 Generations to Prevent ACEs

- **Parents had ACEs without focused treatment**
- **Parents have high risk behaviors affecting parenting**
- **Children with risk of stressed brains, behaviors**
- **Family focused medical home care team**
 - Developmental specialists, therapists, medical team
 - Meet parents' goals for their children
 - Embrace care of entire family
 - Build and sustain continuing relationships

What We Know in 2017 About Programs to Help Young Children



Positive focused interaction

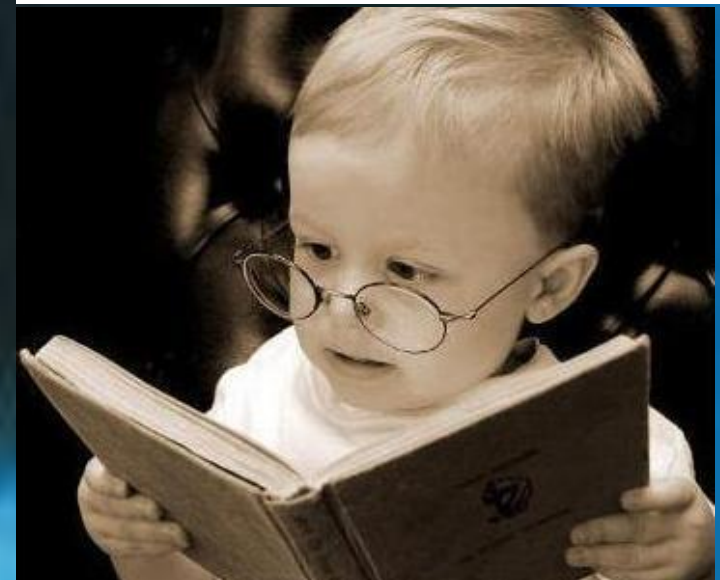
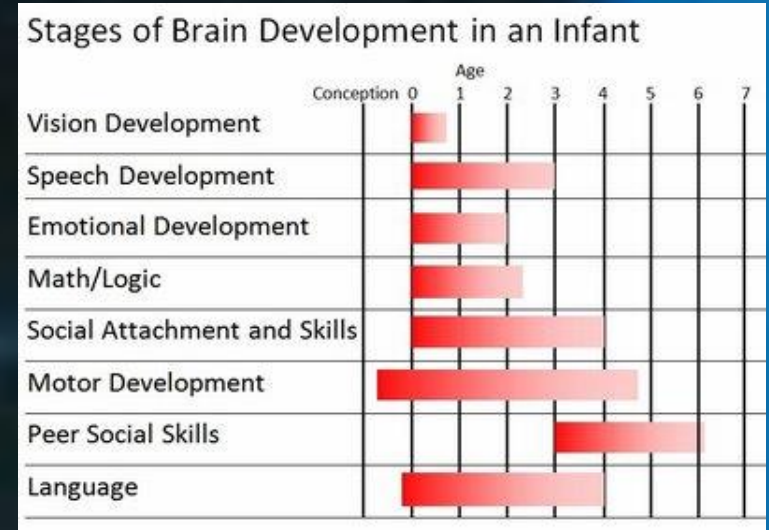
- Home visiting programs support
 - Parents' plan that their child not experience what they did as children
 - Plan to build a life so child can succeed.
 - Keep parents involved if treated
 - Parents need to finish education
- Learning to “parent” from visits



NOT THIS!

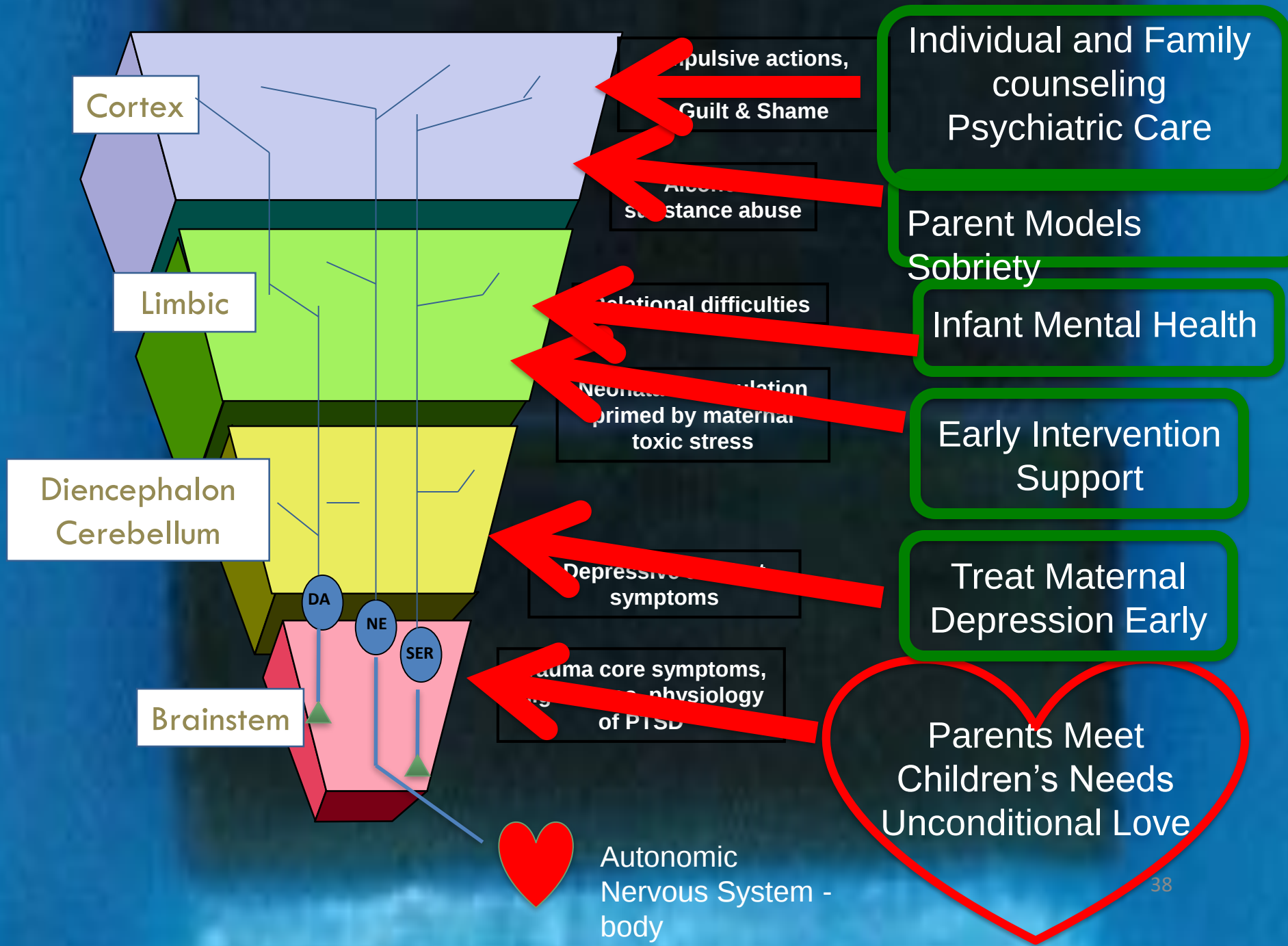
What We Know in 2017 for Infants

- Children need special services
- Home based case management
 - Help parents in their home
 - Model support for infant development
 - Model emotional regulation
- Mastery of early skills provide foundation for advanced skills like reading, can't skip steps
- “Educating” a parent is good but not enough to achieve normal child development



Invest in Services for Parents at Risk; Treatment and Mental Health

- **Build comprehensive treatment, FOCUS and MILAGRO Program models**
 - Healthy pregnancy, delivery, and healthier lives
 - Intervene to prevent toxic stress for another generation
- **Extend home visiting to all parents with ACEs**
- **Early identification of developmental delays**
- **Increase home visiting for all children**
- **Prioritize sustaining funding for next 10 years**
- **Care for parents to improve family health**



Thank You

andrew hsi
FOCUS program
272-3459

ahsi@salud.unm.edu

