

Societal Burden of Child Maltreatment and Public Health's Role in Prevention



James A. Mercy, PhD

Acting Director, Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

CDC and Child Maltreatment

- ❑ Long-standing interest in child maltreatment
- ❑ Atlanta child murder investigation, 1980
- ❑ CDC work has expanded with Congressional appropriations over past 10 years - \$7 million in FY2011

JAMA[®]
The Journal of the American Medical Association

Epidemiologic Analysis of a
Cluster of Homicides of
Children in Atlanta



Child Maltreatment

**Acts of commission (abuse) or omission (neglect)
by a parent or other caregiver
that result in harm, potential for harm,
or threat of harm to a child**

Children

- <18 years

Caregivers

- Anyone responsible for care and control, overall health, and welfare of a child

Types of maltreatment

- Physical, sexual, psychological abuse, and neglect

How Common Is Child Maltreatment?

**In 2009, 1,770 CHILDREN DIED as a
result of maltreatment
= 5 children died every day
= 71 classrooms**

- More than 80% were <4 years**
- Abusive head trauma a major cause**



How Common Is Child Maltreatment?

❑ State Child Protective Service data, 2009

- 6 million reports of alleged child maltreatment
- 702,000 confirmed cases of child maltreatment

❑ Self-report data on maltreatment experience, 2008

- In past year: 1 of 10 or **7.5 million** children
- At some point during childhood: 1 of 5 or **15 million** children



Which Children are Most Vulnerable?

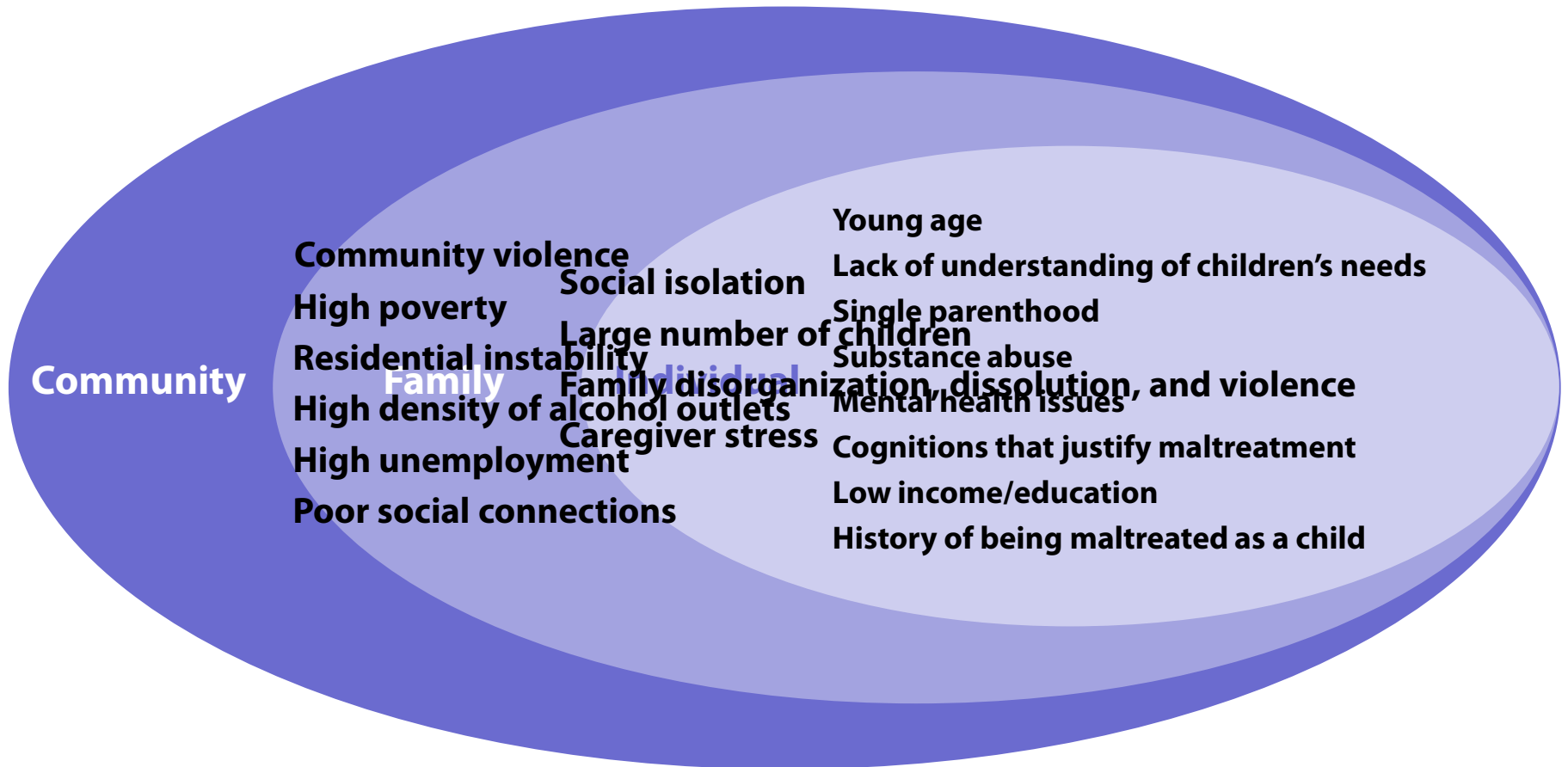
- ❑ **Risk increases with age**
- ❑ **Children <4 years are at greatest risk of severe injury**
- ❑ **Children with special needs that may increase caregiver burden**
 - Learning disabilities
 - Mental retardation
 - Mental health issues
 - Chronic physical illness



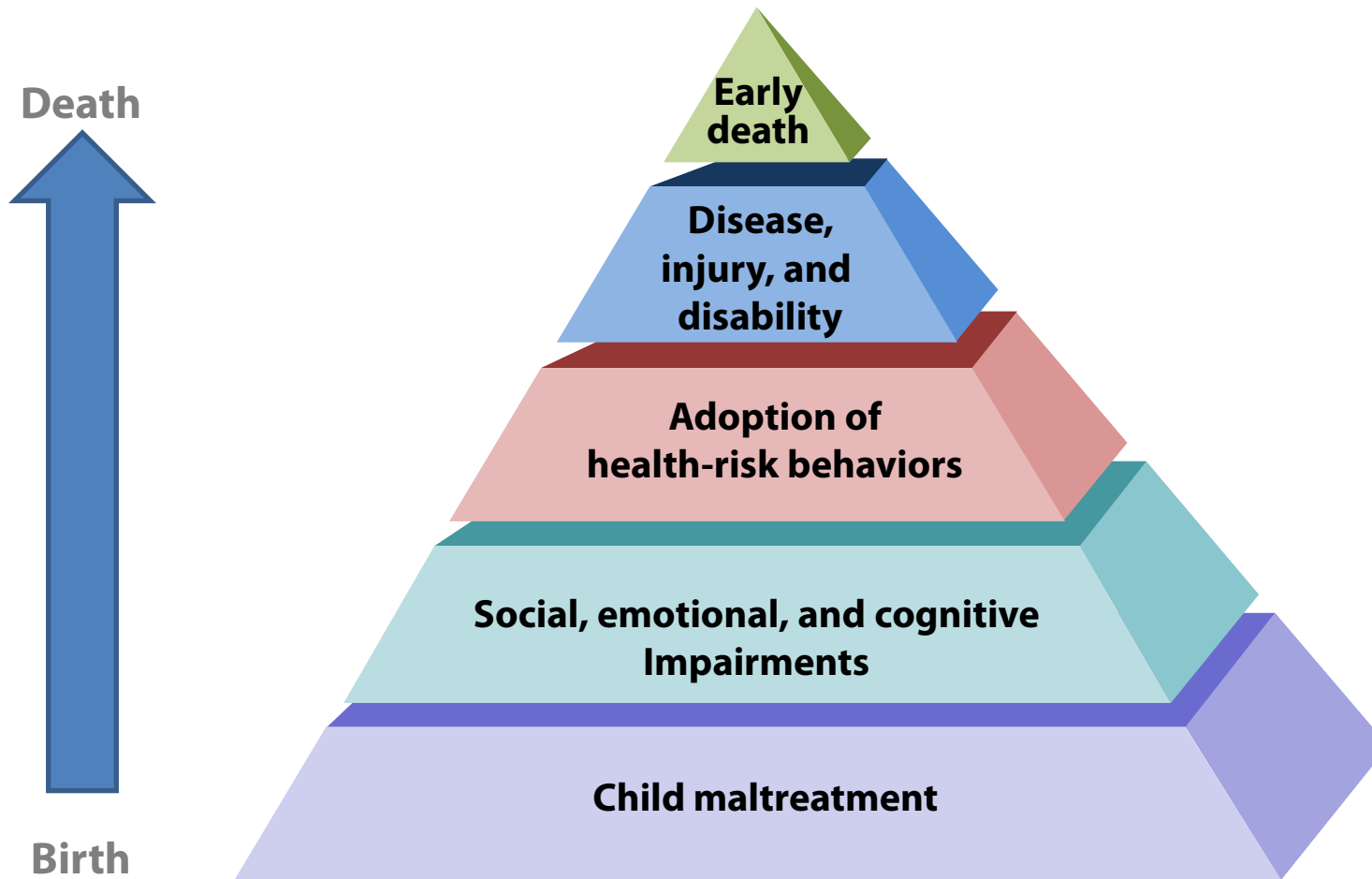
Better Data Are Needed to Track Child Maltreatment

- ❑ **Child Protective Service data is the mainstay of child maltreatment surveillance, BUT**
 - Child maltreatment is underestimated by a factor of 10
 - Epidemiology of the problem is distorted
- ❑ **New methods are needed to track the magnitude of child maltreatment**
 - Surveys of children and parents
 - Better use of hospital discharge and emergency department data

Risk Factors for Child Maltreatment Perpetration



The Influence of Child Maltreatment throughout Life



Consequences of Child Maltreatment

Disease, Injury, and Disability

- **STDs, including HIV**
- **Gynecological problems**
- **Heart disease**
- **Diabetes**
- **Stroke**
- **Cancer**
- **Suicide**

Health-risk Behaviors

- **Sexual promiscuity**
- **Sexual perpetration**
- **Alcohol abuse**
- **Illicit/injected-drug use**
- **Smoking**

Social, Emotional, and Cognitive Impairments

- **Depression, post-traumatic stress disorder (PTSD)**
- **Aggression**
- **Anxiety**
- **Somatic complaints**
- **Attempted suicide**
- **Social ostracism**
- **Anxiety**
- **Academic achievement**
- **Re-victimization**
- **Unwanted pregnancy**

The Adverse Childhood Experiences Study

❑ Adverse Childhood Experiences (ACEs)

- Physical, sexual, and emotional maltreatment, and growing up with
 - Intimate partner violence against mother
 - Household substance abuse, mental illness or suicidality
 - Parental separation or divorce
 - Household member in prison

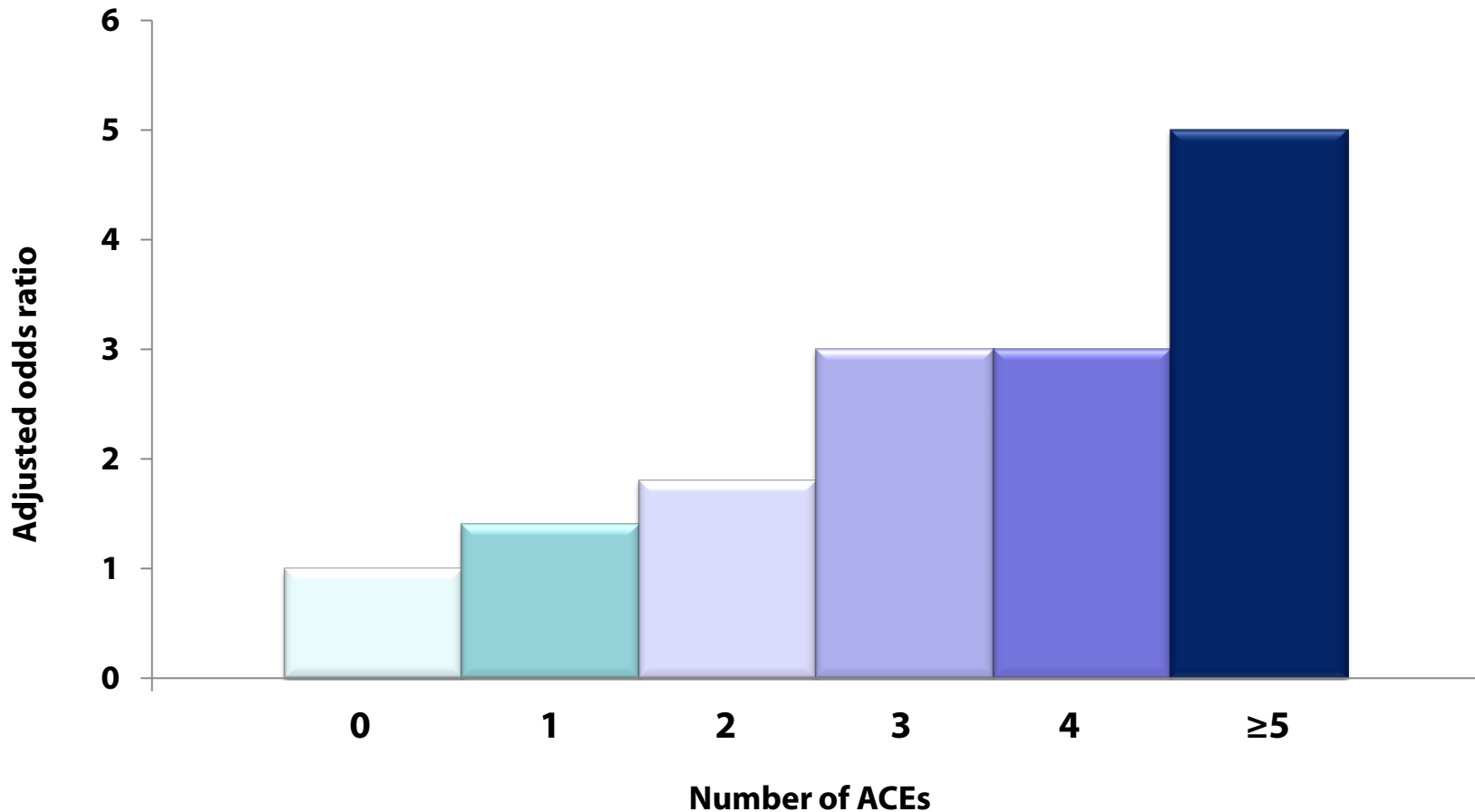
❑ ACE score

- Number of exposures to the different types of adverse experiences that occurred to a respondent as a child

❑ ACE study

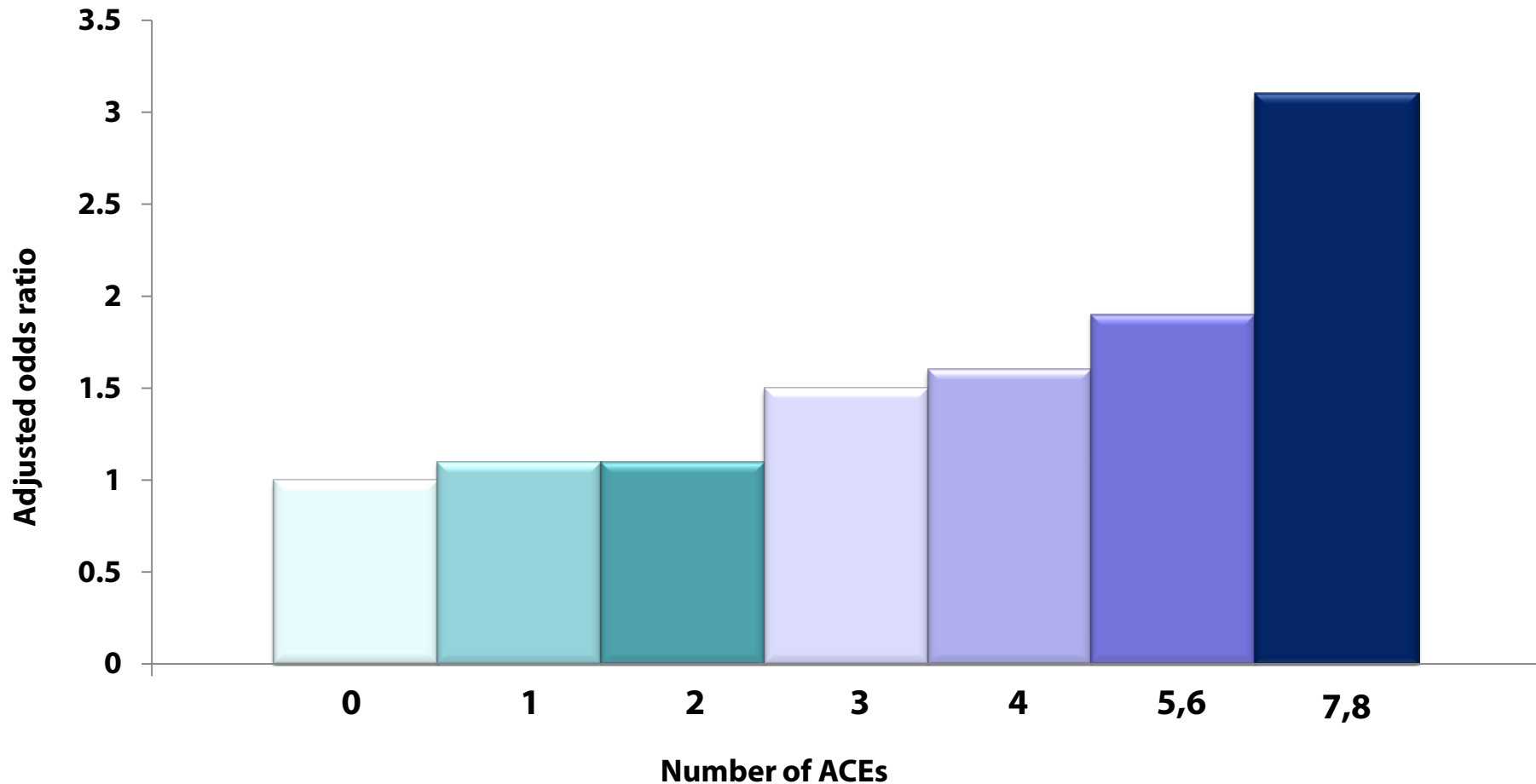
- Retrospective cohort study of >17,000 participants
- HMO population Kaiser Permanente in San Diego
- Impact of ACEs on health throughout the lifespan

ACE Score and Adult Depression



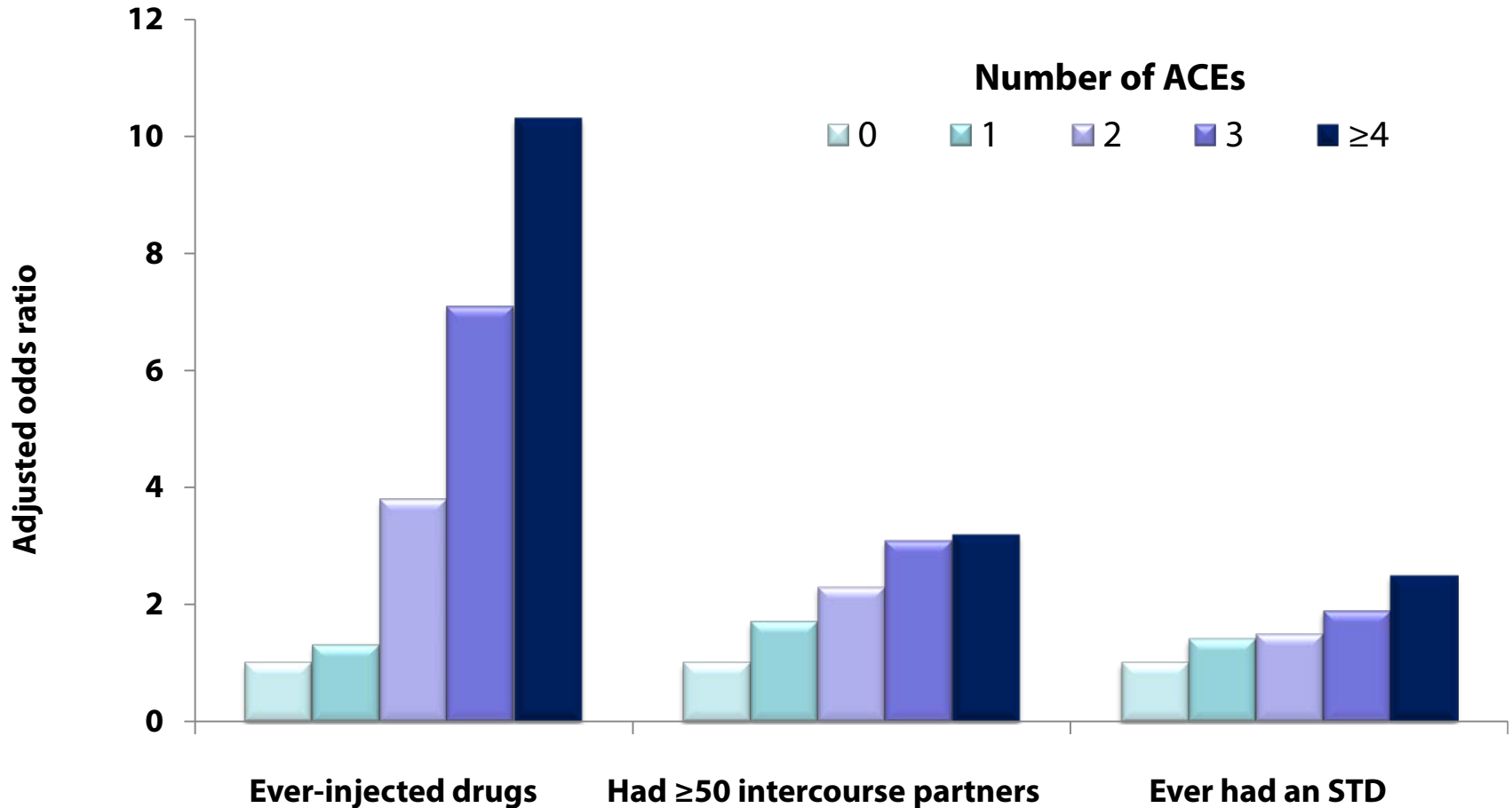
ACE, Adverse childhood experience
Chapman, DP et al. *Journal of Affective Disorders* 2004;82:217-225
Gonzalez, O et al. *MMWR* 2010;59(38):1229-1235

ACE Score and Adult Cardiovascular Disease



ACE, Adverse childhood experience
Dong, M et al. Circulation 2004;110:1761-1766

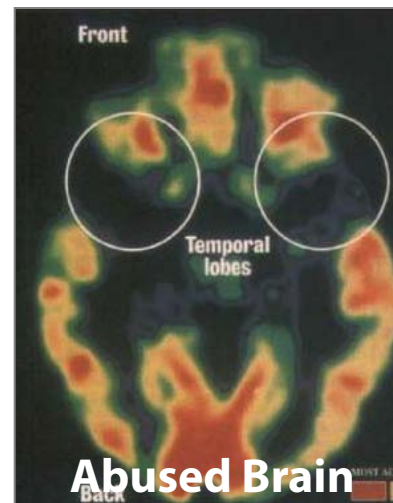
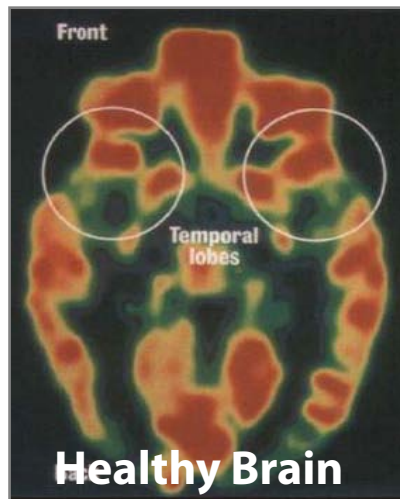
ACE Score and HIV Risks



ACE, Adverse childhood experience
Felitti, VJ et al. American Journal of Preventive Medicine 1998;14:245–258

Child Maltreatment Compromises Early Brain Development

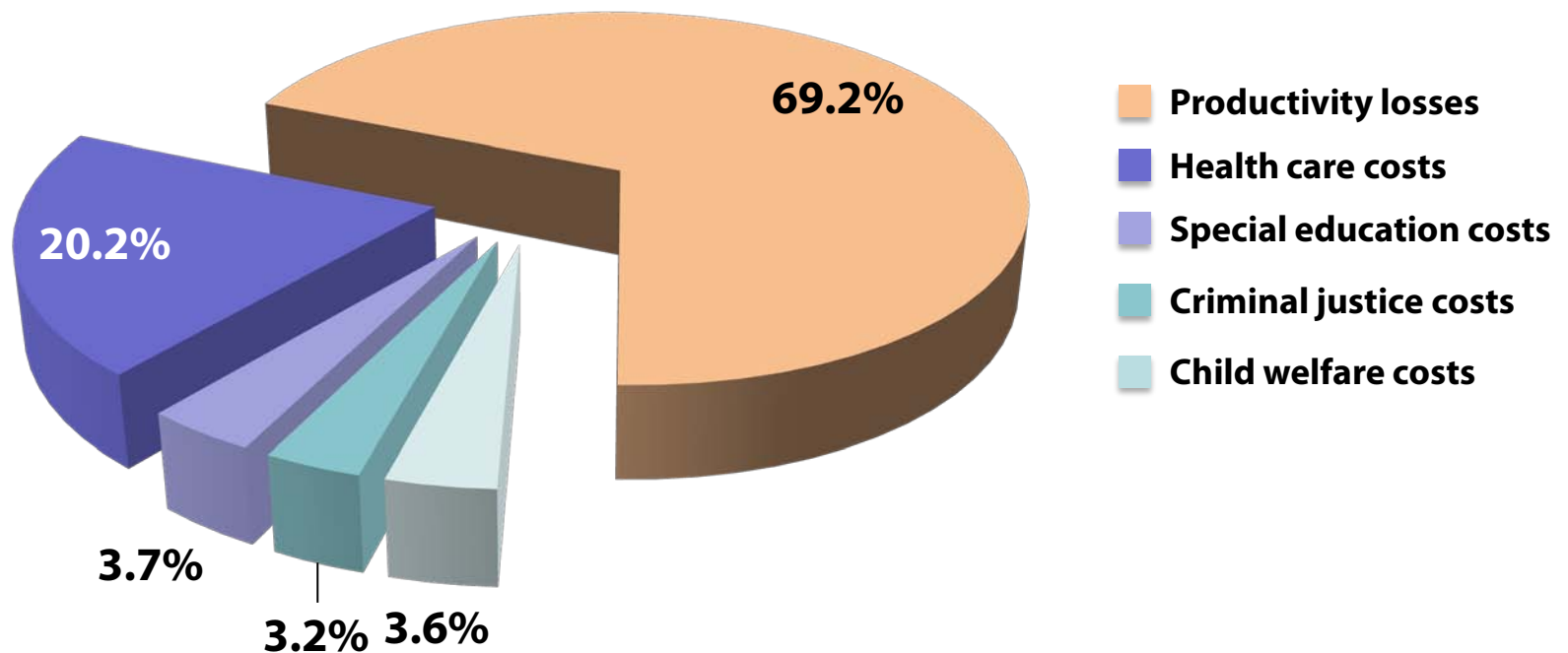
- ❑ **Excessive, repeated stress causes the release of chemicals that**
 - Impair cell growth and the formation of healthy neural circuits
 - Damage the brain's stress response system
 - Contribute to premature aging of the body



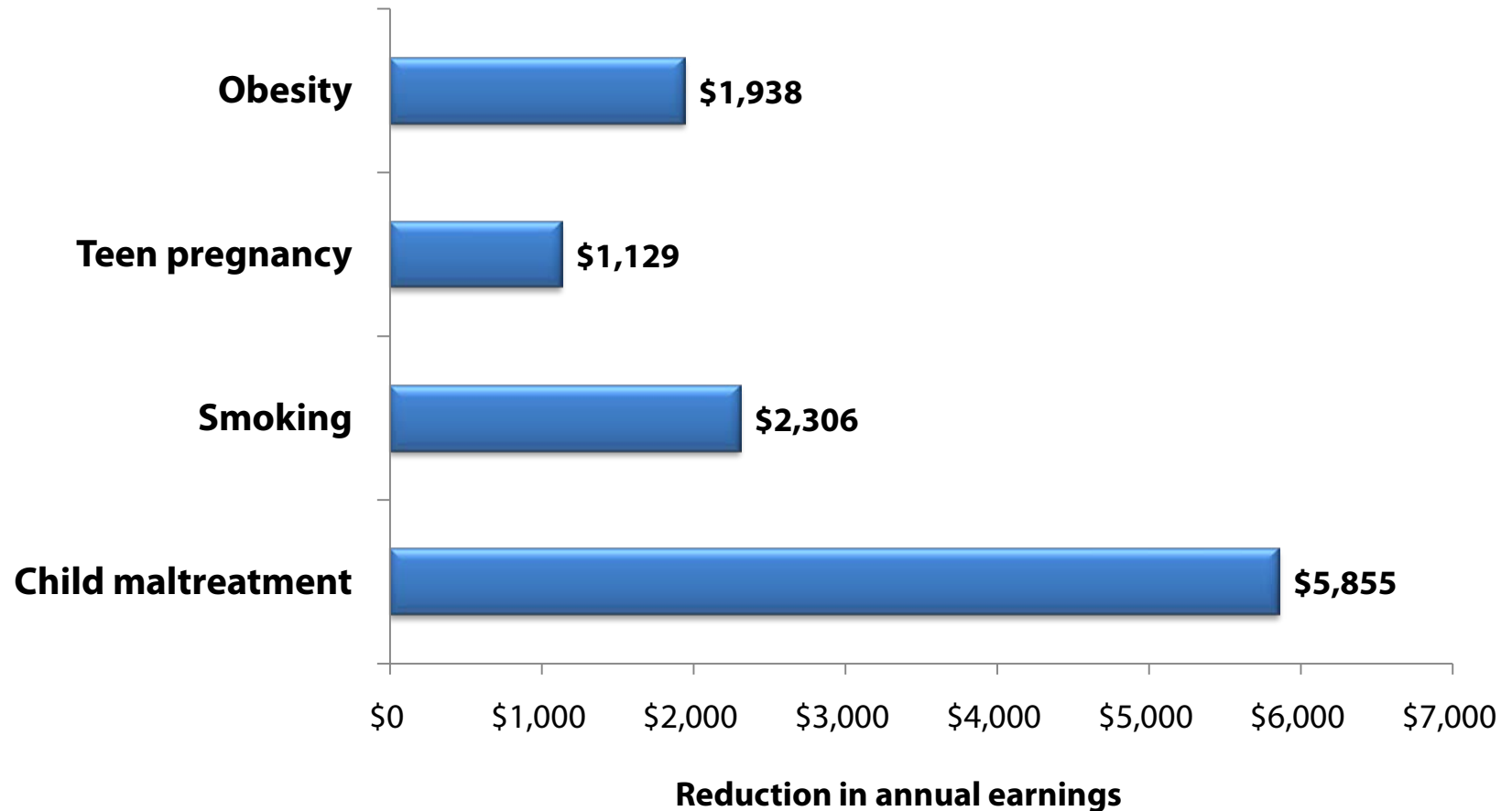
National Scientific Council on the Developing Child, Excessive Stress Disrupts the Architecture of the Developing Brain. Working Paper No. 3. [online] 2005 [cited 2006 Aug 10]. Available from: www.developingchild.net/reports.shtml

Lifetime Economic Burden of Child Maltreatment: \$121 billion in 2008

Economic burden



Reduction in Annual Earnings from Selected Health Events (2009 Dollars)



Challenges to Reducing Child Maltreatment

- ❑ Broad range of short-term and long-term health consequences are underappreciated**
- ❑ Absence of a valid and reliable surveillance system**
- ❑ As a society we have not prioritized primary prevention but invested largely in response through the child welfare system**
- ❑ Public health is not well integrated into a coordinated prevention system**

CDC Approaches to Reducing Child Maltreatment

□ Bringing focus to evidence-driven prevention by

- Raising visibility about health consequences and costs
- Ensuring the availability of valid and reliable data
- Filling gaps in the evidence base by moving the field toward environmental, population-based interventions
- Strengthening and mobilizing the public health system



The Importance of Viewing Child Maltreatment in a Broad Societal Context

The healthy development of all children benefits society by providing a solid foundation for economic productivity, responsible citizenship, strong communities, and a secure nation

Prevention Works!

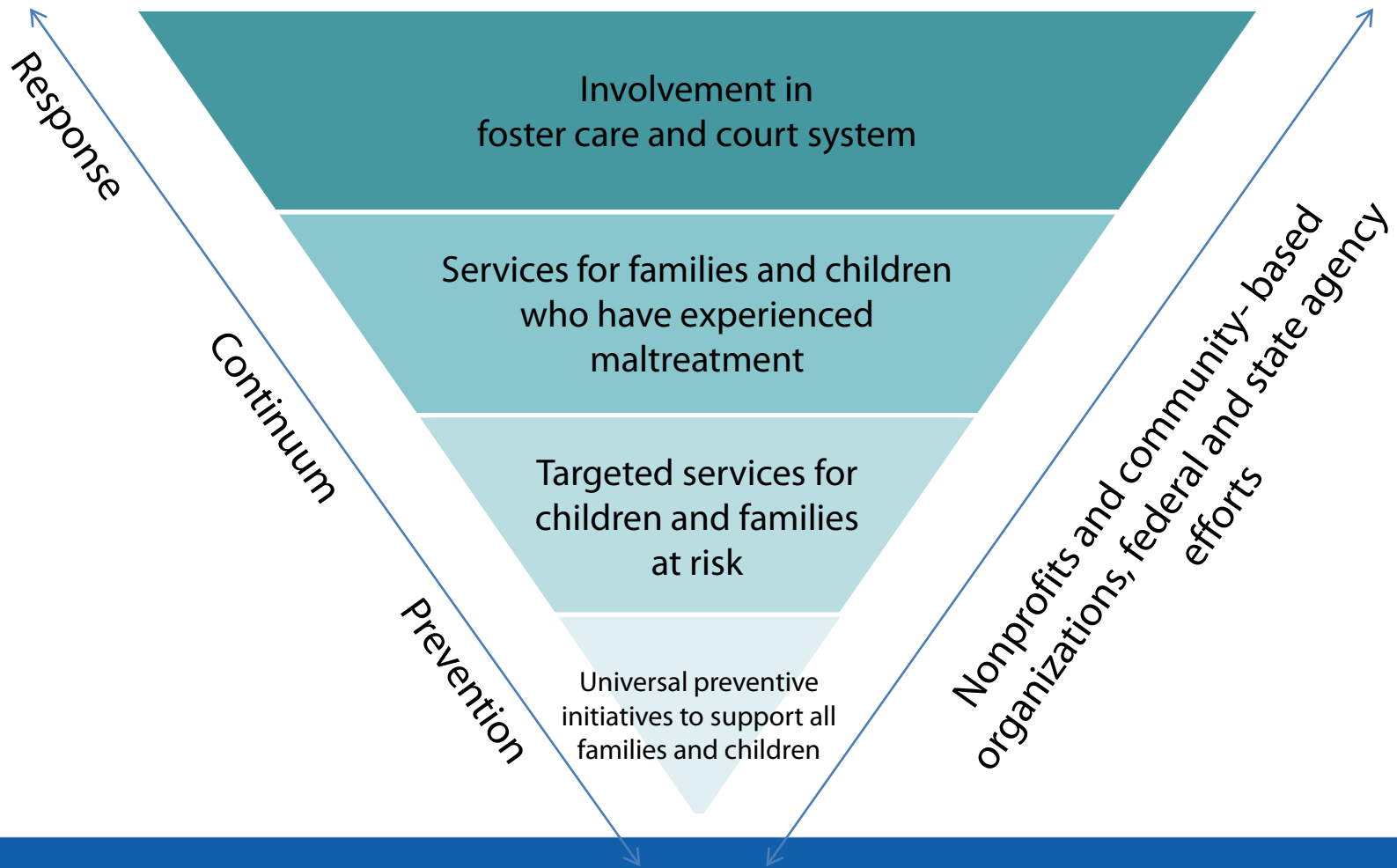


Janet R. Saul, PhD

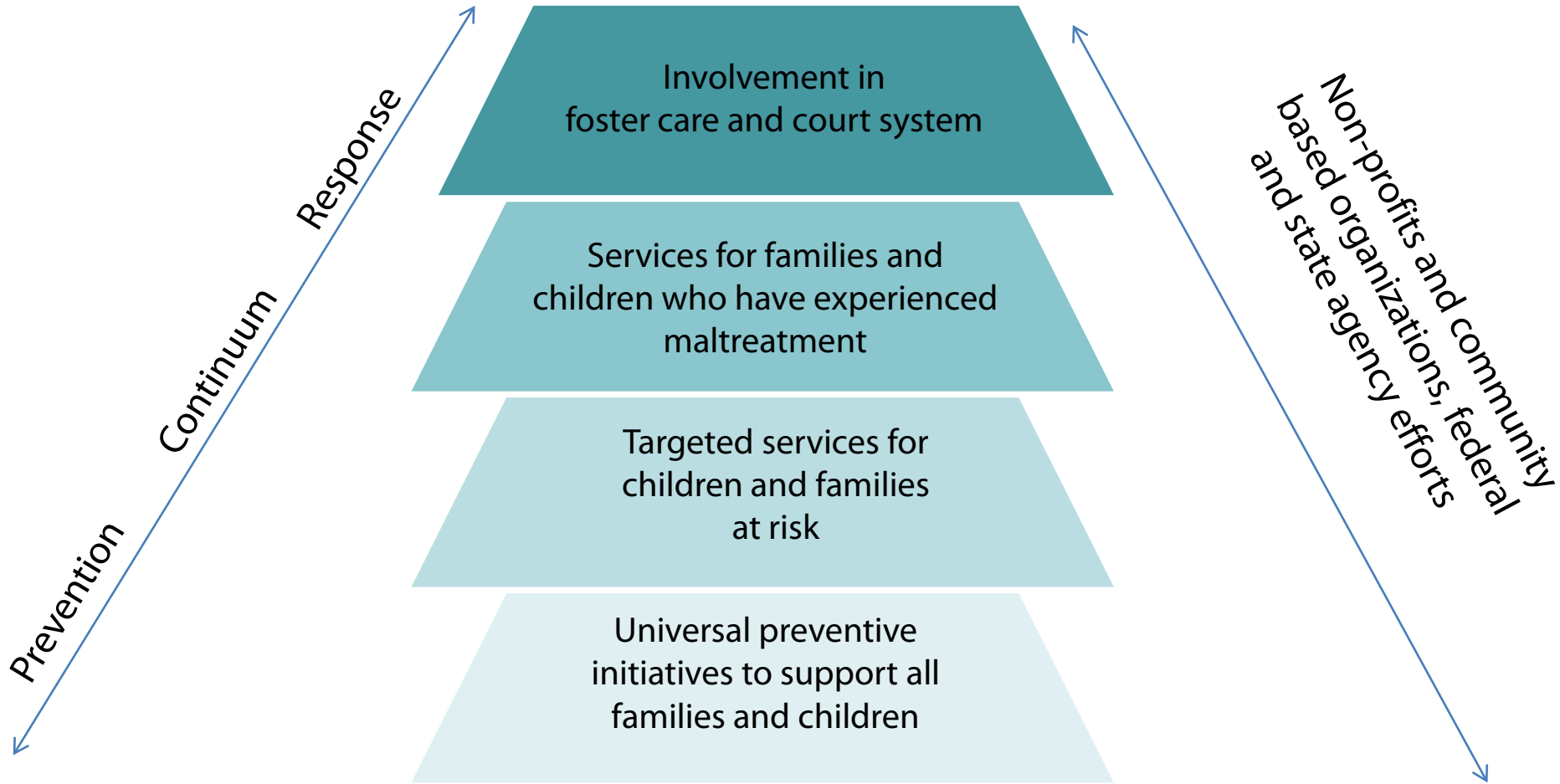
Acting Special Advisor, Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention

Addressing Child Maltreatment in the United States

Current System



Addressing Child Maltreatment in the United States Ideal System



CDC's Role in Child Maltreatment Prevention

Ensuring Safe, Stable, and Nurturing Relationships (SSNRs) for ALL Children



☐ Safety

- Freedom from fear
- Security from physical or psychological harm

☐ Stability

- Predictability and consistency

☐ Nurturing

- Sensitive and consistent response to the child's needs

CDC's Role in Child Maltreatment Prevention

Ensuring Safe, Stable, and Nurturing Relationships (SSNRs) for ALL Children



❑ **SSNRs go beyond parents**

- Other caregivers and important adults
- Environments conducive to SSNRs

❑ **SSNRs are based on scientific literature**

- Healthy development depends on the quality and reliability of children's relationships
 - Builds healthy brain architecture
 - Provides foundation for learning, positive behavior, and health

Prevention Works!

Home Visitation

- ❑ **Principle: Trained personnel visit families during the child's first 2 years of life**
 - Provide information, support, and training about child health, development, and care
- **Guide for Community Preventive Services**
 - Recommends home visitation for preventing child maltreatment
 - Several models exist; not all are equally effective

Articles

Recommendations to Reduce Violence Through Early Childhood Home Visitation, Therapeutic Foster Care, and Firearms Laws

Task Force on Community Preventive Services

Home visitation has been shown to produce substantial beneficial effects in preventing child abuse and neglect. On the basis of three risk factors for child abuse and neglect (single mother, young mother, and low educational achievement), we can estimate the U.S. population that might benefit from home visitation programs to be large, at ≥ 1.7 million children annually. The question remains whether home visitation

Prevention Works!

Home Visitation

☐ Affordable Care Act

- Created the Maternal and Infant Early Childhood Home Visitation Program
 - Led by Health Resources and Services Administration in collaboration with the Administration for Children and Families and other federal agencies, including CDC
- Funding is available to states, territories, and tribes to implement evidence-based home visitation models (7 models)
- Lead agency at the state level appointed by the governor
 - Public health agency is the lead agency in >30 States and territories
- Major milestone in prevention of child maltreatment
 - National program
 - Potential for nationwide implementation

Prevention Works!

Nurse Family Partnership

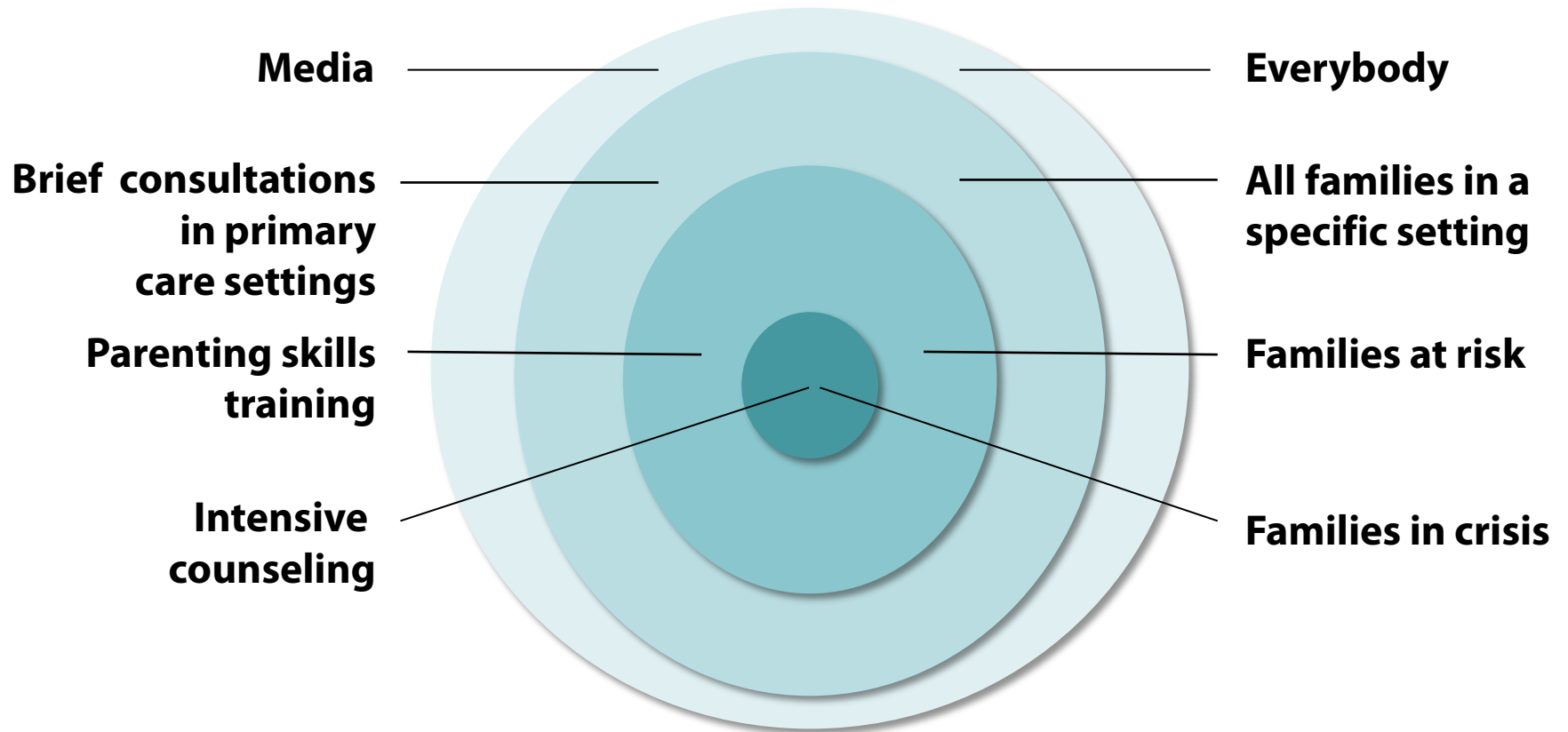
❑ Nurse Family Partnership (NFP)

- Registered nurses conduct the home visits
- For 1st time moms and their babies

❑ Evidence

- 46% less child maltreatment in families participating in the Nurse Family Partnership than comparison families
- Decreased injuries requiring medical attention
- Benefit/cost ratio: \$6.10 in benefits to society for every \$1 in cost

Prevention Works! Triple P



Prevention Works!

Triple P

❑ **Rigorous evaluation**

- Multiple randomized controlled trials
- CDC-funded multi-county trial in South Carolina; 1st study to measure impact on of Triple P outcomes of child maltreatment

❑ **Evidence of impact**

- Estimated changes in rates per 100,000 children
 - 306 fewer cases of child maltreatment
 - 188 fewer out-of-home placements
 - 60 fewer injuries seen in hospitals (ER visits, hospitalizations)

Prevention Works!

Triple P

□ Implementation

- Triple P is available to any community for the cost of training and materials
- CDC is funding 2 demonstration sites
 - Berrien County, MI and Pitt County, NC
 - Implemented by public health and federally qualified health centers within Health Resources and Services Administration

□ Cost

- Estimate of program cost: \$12.74/child
- Benefit/cost ratio: \$47 in benefits to society for every \$1 in program cost

Prevention Works!

Abusive Head Trauma Prevention

❑ Abusive head trauma prevention

- Information for parents of newborns
 - About the serious adverse effects of shaking an infant
 - Guidance on how to handle a crying infant and avoid shaking

❑ Evidence

- Hospital-based program tested in New York
- 47% reduction in abusive head trauma over 7-year period with no similar decrease in comparison



Prevention Works!

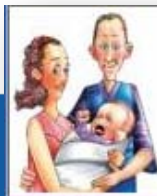
Abusive Head Trauma Prevention

❑ Implementation

- Legislation in 14 states mandates implementation of hospital-based abusive head trauma prevention programs

❑ CDC funding of 2 state-wide demonstrations on a state-wide scale

- Objective
 - Evaluate impact on abusive head trauma at the state level
 - Track cost to determine any cost benefit
- Pennsylvania: Broadening the program tested in NY
- North Carolina: Evaluation of the Period of PURPLE Crying® program, developed by the National Center on Shaken Baby Syndrome

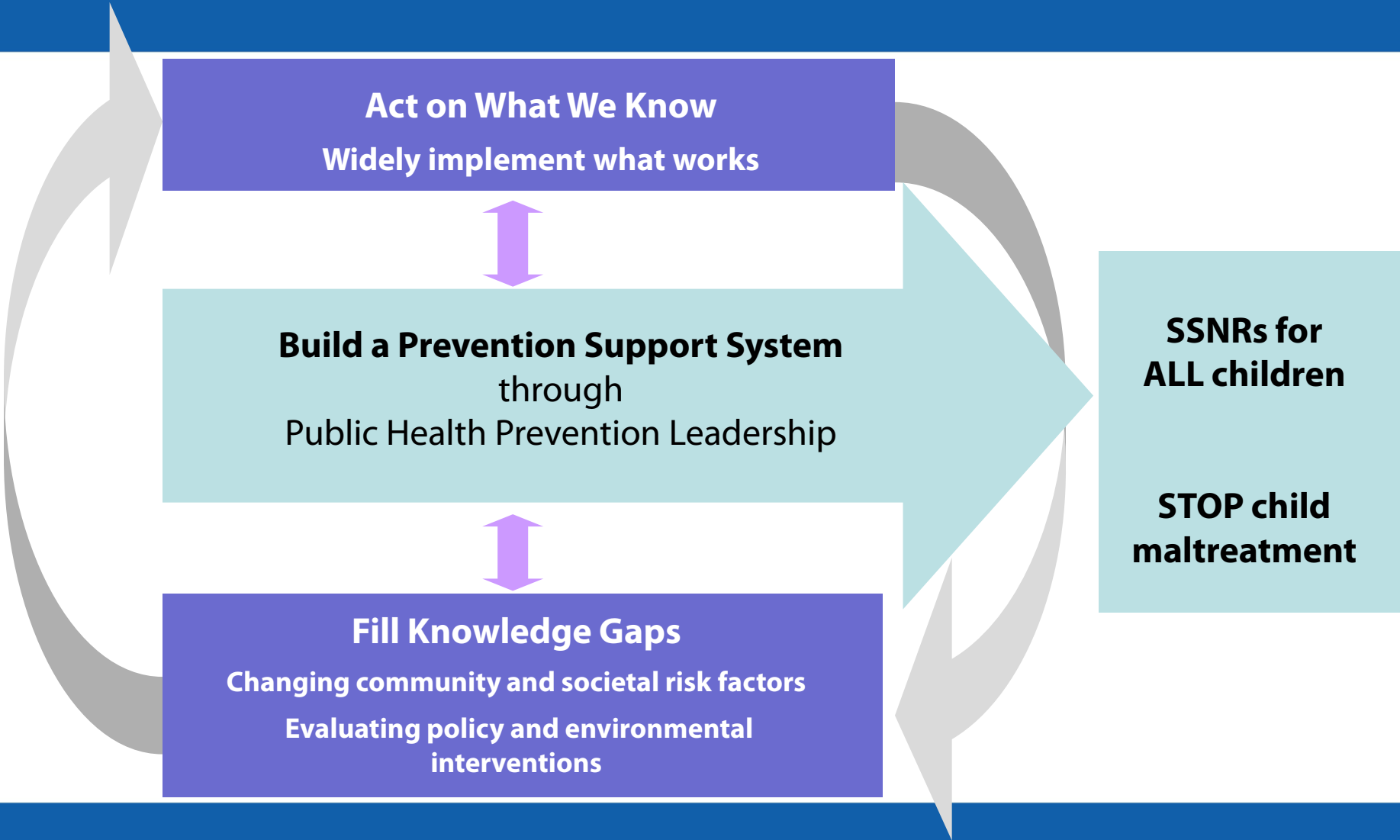


Period of **PURPLE** Crying®:
Keeping Babies Safe in North Carolina

Future Directions

Public Health Leadership Initiative

- ❑ **Purpose: Strengthen public health capacity**
- ❑ **WHY public health?**
 - Child maltreatment **IS** a public health problem
 - Experience working on complex problems that require multi-disciplinary engagement
- ❑ **Assessment of current situation**
 - Designated staff or program (n=20)
 - Involvement in the state strategic plan (n=16)
 - Mandated participation of public health (n=19)



SSNRs, Safe, stable, and nurturing relationships

A State's Perspective on Prevention of Child Maltreatment



Shairi R. Turner, MD, MPH

Deputy Secretary for Health
Florida Department of Health



<http://www.doh.state.fl.us>

The Burden of Child Maltreatment in Florida

- ❑ **>4 million children in Florida**
- ❑ **In 2009, there were 45,841 confirmed cases of child maltreatment**
 - The majority (53%) were neglect
 - ~11% were confirmed as physical abuse
 - ~ 5% were confirmed as sexual abuse
- ❑ **Rates of child maltreatment are similar to the national average**
 - FL: 11.3/1,000
 - USA: 9.3/1,000

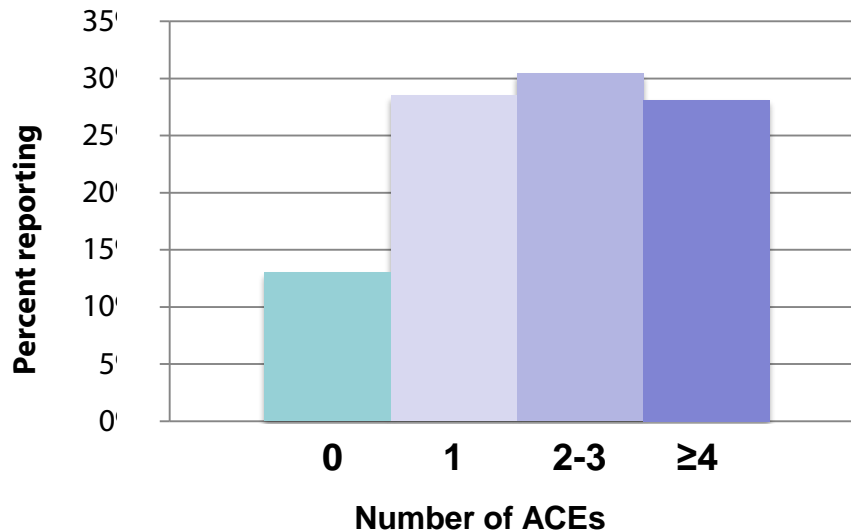
Behavioral Risk Factor Surveillance System Data

Adverse Childhood Experiences Questions

❑ Adverse Childhood Experiences (ACE)

- Physical, sexual, and emotional child maltreatment, and growing up with
 - Intimate partner violence
 - Household substance abuse or mental illness
 - Parental separation, divorce, or incarceration
 - Household crime

❑ 8,821 FL respondents, 2008

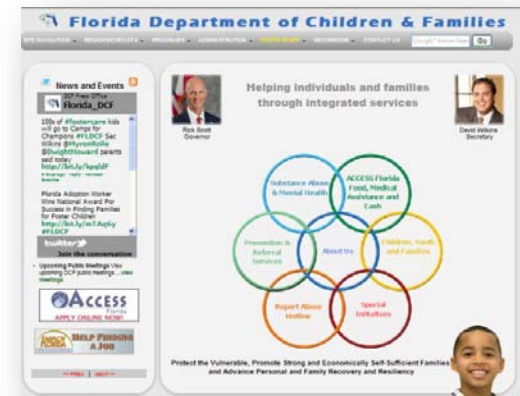


Societal Cost of Child Maltreatment in Florida

- ❑ **Addressing child maltreatment that has already occurred is far more costly than preventing it**
- ❑ **Estimated annual cost to Florida: \$9,422,204,981**
 - Medical care
 - Other public programs
 - Mental health
 - Public education
 - Loss of quality of life
 - Lost earnings
 - Property damage

Agency Collaboration to Prevent Child Maltreatment and Protect Children in Florida

- **The Department of Children and Families is the lead agency for reported cases of abuse and neglect**
- **The Department of Health does prevention and intervention in conjunction with the Department of Children and Families**



Florida Child Abuse and Neglect Efforts 2007 Legislation

❑ Governor's Office of Adoption and Child Protection

❑ The Children and Youth Cabinet

- Department of Children and Families
- Department of Juvenile Justice
- Agency for Health Care Administration
- Agency for Persons with Disabilities
- Agency for Workforce Innovation
- State Surgeon General
- Commissioner of Education,
- Director of the Guardian *ad Litem* Office
- Chief Child Advocate
- Representatives from Child Advocacy groups

❑ The Child Abuse Prevention and Permanency Advisory Council, chaired by the Chief Child Advocate

Florida Child Abuse Prevention and Permanency Plan, July 2010–June 2015

❑ **Vision: Florida's highest priority is that children are raised in healthy, safe, stable, and nurturing families**

❑ **Prevention strategies**

➤ Infuse the 5 protective factors into Florida systems that serve parents and children

➤ Strengthen Florida systems to better serve the needs of Florida families

➤ Provide information on ways to ensure children are safe and nurtured and live in stable environments that promote well-being

➤ Inform and instruct education and law enforcement communities

➤ Monitor and evaluate plan implementation

Prevention Efforts

Healthy Families Florida

Healthy Start Program

Infant Mental Health Plan

Sexual Violence Prevention Program

Teen Parent Program

Florida Parent Help Line

Florida Circle of Parents

Speak Up, Be Safe

Unique Role of the 26 Florida Child Protection Teams (CPT)

❑ **Medically-directed, community-based, multidisciplinary**

- Examine cases of potential child abuse and neglect
- Provide an objective assessment
 - Medical evaluations and diagnoses
 - Forensic and specialized interviews
 - Family psychosocial assessments and psychological evaluations
 - Child maltreatment training for family members and professionals
- Supplement the investigational activities of the Department of Children and Families or sheriff's offices

❑ **In 2009**

- >190,000 cases reviewed; 29,000 children received services
- >16,000 children confirmed to have experienced maltreatment

Child Abuse Death Review Committee

❑ **Independent entity, administratively housed in Florida Department of Health**

- Reviews cases to inform potential prevention approaches
- Comprised of members from
 - 8 agencies: DOH, Juvenile Justice, Agency for Health Care Administration, etc.
 - 11 other members appointed by the State Surgeon General

❑ **2009: 197 reviews were performed (7% of child deaths)**

- 84% were <5 years old, and 61% were male
- 27% physical abuse, and 22% suffocation from unsafe sleep environments

Conclusion

❑ **Critical components for prevention of child maltreatment**

- Commitment from governor and agency leaders
- Statutory authority for planning and collaboration
- Institutional history of collaboration

❑ **Role of public health**

- Encourage looking at broader factors that affect children and families from a public health perspective
- Emphasize health aspects and future consequences of child maltreatment
- Provide opportunities to interact with families in a non-threatening environment and incorporate protective factors
- Build strong partnership for strategic planning and implementation among health programs

Policy Approaches for Preventing Child Maltreatment



Patrick T. McCarthy, PhD
President and CEO
The Annie E. Casey Foundation

<http://www.aecf.org>

The Annie E. Casey Foundation

❑ Policy Priorities: Poverty, Place, and Permanence

❑ Policy reform themes

➤ Families

- Strengthen families through programs and investments in communities, housing, parenting, and equal opportunity

➤ Evidence

- Support evidence-based programs with track record of replication; reduce support for interventions that weaken families

➤ Scale

- Take the most promising programs to a broader scale, with the goal of population-level results

The Role (and Limits) of Policy

- ❑ **Risk factors: Poverty, place, family dysfunction, and community norms**
- ❑ **Maltreatment will be reduced if we**
 - Reduce poverty
 - De-concentrate poverty and community dysfunction
 - Increase effective family strengthening interventions
 - Promote positive parenting norms
- ❑ **The link between poverty and child maltreatment**

Child maltreatment is 22 times more likely in families with annual incomes <\$15,000 than in families with annual income >\$30,000

Poverty Policy

❑ Emerging consensus around need for a two-generation strategy

- Education, especially early learning and literacy, and multiple re-engagement opportunities for disconnected youth
 - Average cognitive scores of children in highest socioeconomic group are 60% above the scores of lowest socioeconomic group
- Delayed first birth (community-based pregnancy prevention)
 - Child's chance of growing up in poverty is 9x greater if born to an unmarried teen mother without a high school degree
- Early attachment to the workforce
- Making work pay by supplementing income via
 - Earned income tax credit and Child tax credit
- Making work work via benefits and supports enabling parents to work and parent: Health, child care, paid leave, unemployment

Lee and Burkam. Inequality at the starting gate: Social background differences in achievement as children begin school. Economic Policy Institute, 2002

Steep Decline in teen birth rate significantly responsible for reducing child poverty and single-parent families, Committee on Ways and Means, Democrats. In Committee Issue Brief, April 23, 2004

Policies for Addressing Poverty Building and Protecting Family Assets

□ Asset development and protection

- Individual development accounts
 - Deposits of savers are matched, provided that they participate in financial education and use the savings for targeted purposes
- Home ownership
 - Net worth of a typical low-income household is \$7,900
 - Net worth of a typical low-income homeowner is \$50,000
- Financial coaching
 - Connect families with institutions that offer small loans, secured credit cards, individual development accounts or matched savings accounts
- Restrictions on predatory practice
 - Falling prey to harsh practices is one of the easiest and fastest ways for low-income residents to accumulate debt

Policy Matters: The American Recovery and Reinvestment Act Kept Millions Out of Poverty

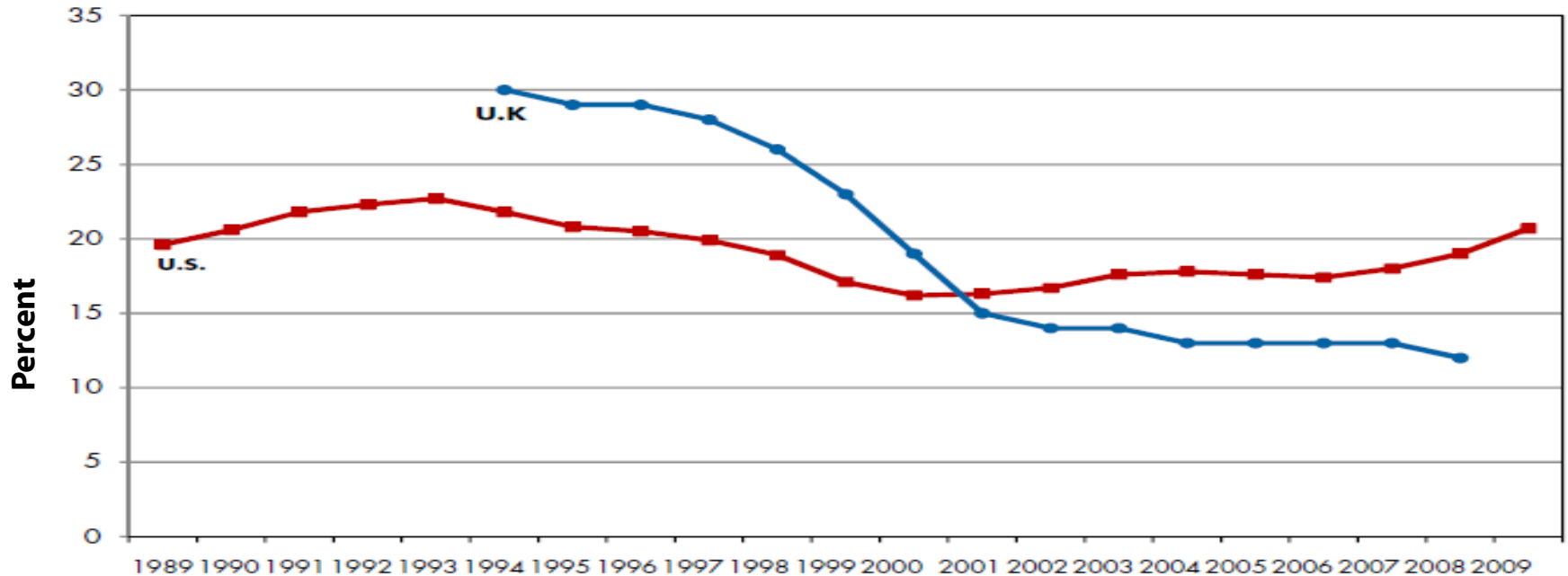
Estimated numbers of persons and numbers of children kept out of poverty in 2009 by the stimulus act (In millions)

	All Ages	Children
Making work pay credit	1.6	0.5
Child tax credit expansion	1.0	0.6
EITC expansions	0.5	0.3
Food stamp increase	1.1	0.5
Unemployment insurance extension	0.7	0.2
Unemployment Ins: additional \$25/ week	0.1	0.03
\$250 payments	0.6	0.06

32,680,000: Projected number of poor people for whom the severity of poverty has been reduced by ARRA benefits in 2009

Strengthening Families by Addressing Poverty

Absolute poverty in the U.S. and U.K. 1989–2009

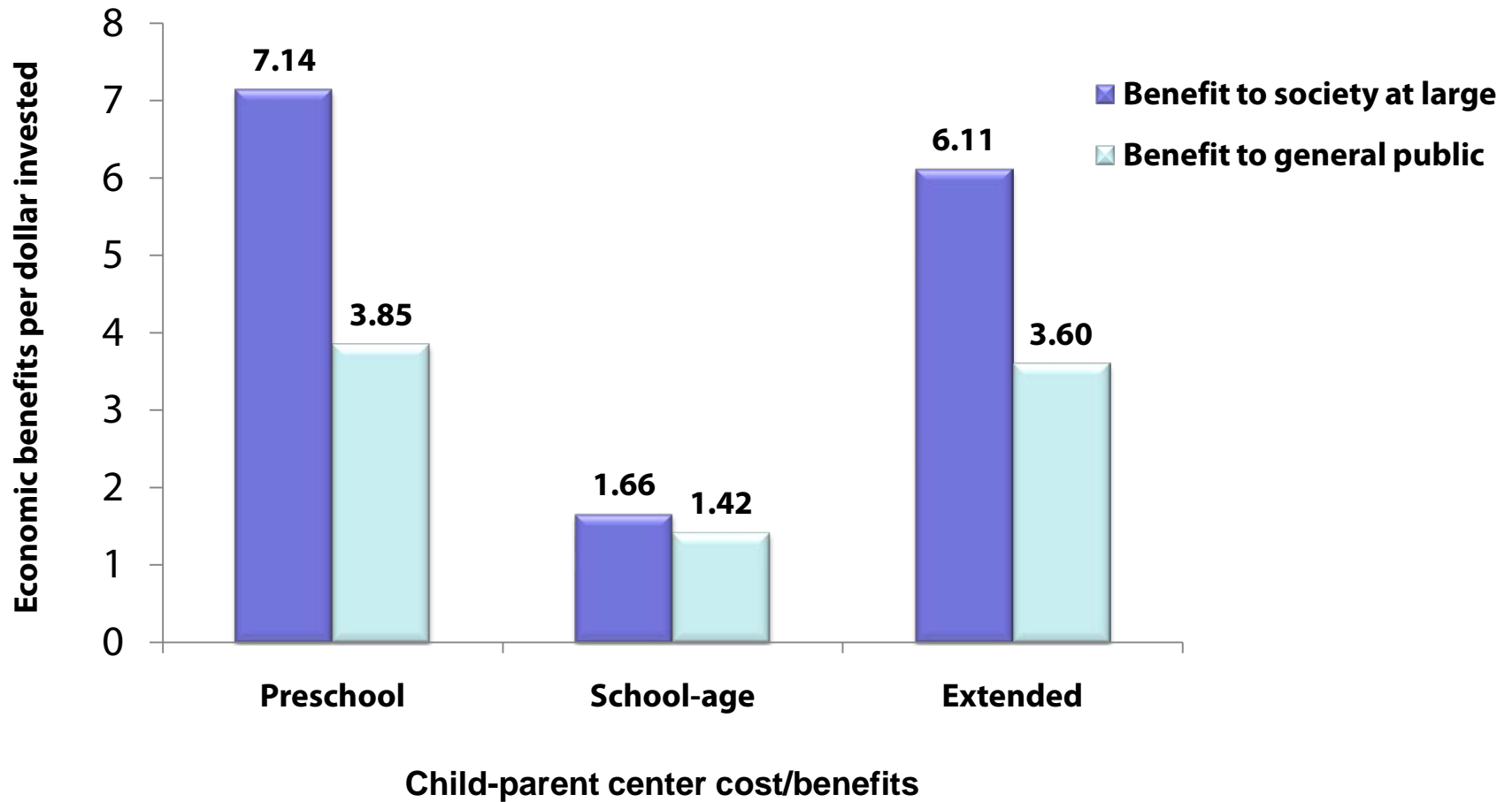


U.S.: Percent of all persons under 18 years below official US Poverty Line, 1989–2009 (~35% of median income in 2000)



U.K.: Percent of U.K. children below the absolute poverty threshold, 1989–2008 (~60% of median income in 1998–1999)

Family Strengthening Policies



Reynolds, AJ. Success in Early Intervention: The Chicago Child-Parent Centers, Lincoln, NE. University of Nebraska Press, 2000.

The Child Welfare System and New Policy Opportunities

□ Alternatives to child placement as a 1st resort

- Differential response system
 - One size does not fit all for responding to child maltreatment
 - Numbers of victims reduced 22–67% with different strategies
 - >30 child welfare jurisdictions have completely or partially integrated differential response system into their systems
- NYC's increase in both preventive and protective capacity
 - Congregate care reduced by 47%
 - \$41M savings reinvested in supportive services
- Many other states reduced length of stay in foster/state care in large urban systems
 - VA – 14% drop in program foster care population; statewide drop of 11%
 - LA – 33% decrease of children in residential care
 - ME – 73% decrease of children in residential placements

Alternative Responses to Child Maltreatment: Findings from NCANDS, USHHS, July 2005. <http://aspe.hhs.gov/hsp/05/child-maltreat-resp/report.pdf>

http://www.childwelfare.gov/pubs/issue_briefs/differential_response/differential_response.pdf

http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&dDocName=id_001627&RevisionSelectionMethod=LatestReleased

Differential Response System (DRS), State of CT, Department of Children and Families, <http://www.ct.gov/dcf/cwp/view.asp?a=3741&Q=439746>

Rightsizing Congregate Care: A Powerful First Step in Transforming Child Welfare Systems, The Annie E. Casey Foundation, 2009

http://www.aecf.org/~media/Pubs/Topics/Child%20Welfare%20Permanence/Foster%20Care/RightsizingCongregateCareAPowerfulFirstStepin/AECF_CongregateCare_Final.pdf

Promising Policy Approaches for Preventing Child Maltreatment

- ❑ **Grounded in evidence-based practice**
 - Focus on the prevention side of the solution, not only on the expensive back-end side
 - Benefit from family-focused models of behavior and community change
- ❑ **States and jurisdictions have demonstrated that innovative and well-thought through policy approaches can work**
- ❑ **Policy approaches often require making hard choices**
 - How we work
 - How we use our time and resource
- ❑ **A genuine national, state, and local commitment for preventing child maltreatment can build upon the most promising evidence and take needed solutions to scale**



- ❑ **Child maltreatment is a huge societal and public health problem**
- ❑ **Currently, main investments are towards response, but prevention must be part of the solution**
 - There are cost effective prevention strategies
- ❑ **Broad societal and community level changes are needed; individual level-change is not sufficient**
 - Federal, state, and non-governmental organizations

WAY FORWARD



**We all have an important role to play
in keeping our children safe!**