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



Blaser, MJ et al. JAMA 1984;251:3255 –3258

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</p>

Caregivers

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

Types of maltreatment

Physical, sexual, psychological abuse, and neglect

Leeb, RT et al. Child Maltreatment Surveillance: Uniform Definitions for Public Health and Recommended Data Elements, Version 1.0. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2007.

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



U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2010). Child Maltreatment 2009. Available from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can

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



U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2010). Child Maltreatment 2009. Available from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can. Finkelhor, D et al. Pediatrics 2009;124:1411-1423

Which Children are Most Vulnerable?

Risk increases with age

Children <4 years are at greatest risk of severe injury</p>

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

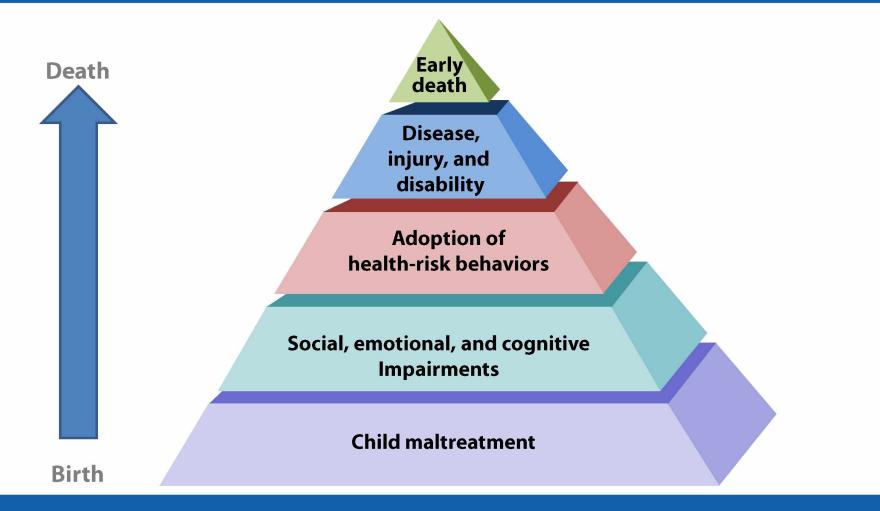
- > Child maltreatment is underestimated by a factor of 10
- Epidemiology of the problem is distorted
- New methods are needed to track the magnitude of child maltreatment
 - Surveys of children and parents
 - > Better use of hospital discharge and emergency department data

Risk Factors for Child Maltreatment Perpetration

Community

Young age **Community violence** Lack of understanding of children's needs **Social isolation High poverty** Single parenthood Large number of o **Residential instab** Substance abuse High density of alcohol outlets Mentarhealth issues **Caregiver stress Cognitions that justify maltreatment** High unemployment Low income/education Poor social connections History of being maltreated as a child

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

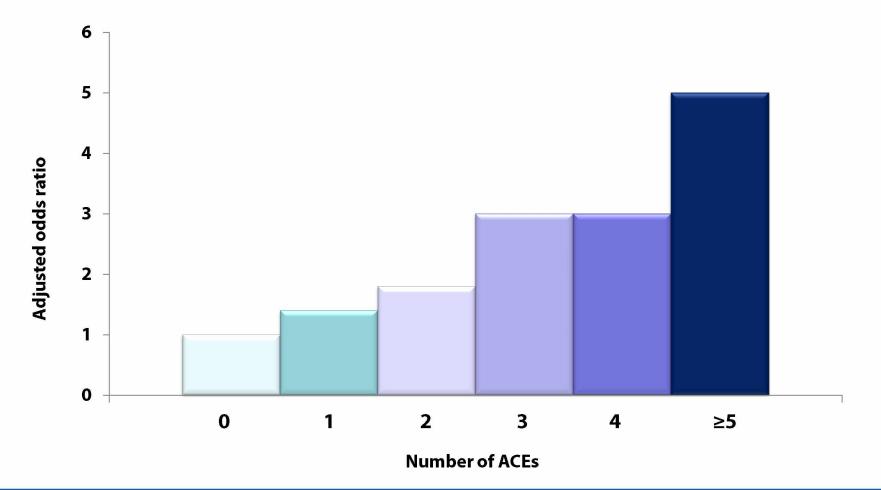
ACE score

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

🖵 ACE study

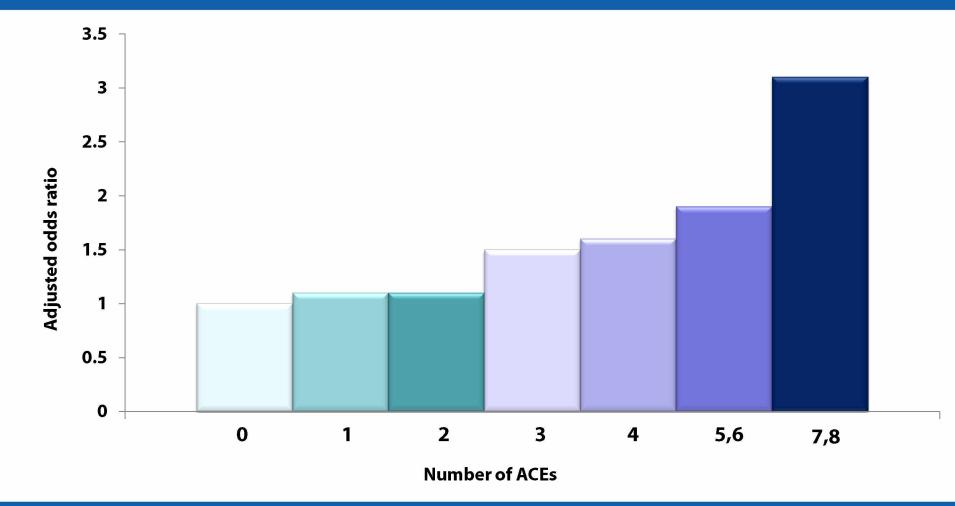
- Retrospective cohort study of >17,000 participants
- HMO population Kaiser Permanente in San Diego
- Impact of ACEs on health throughout the lifespan

ACE Score and Adult Depression



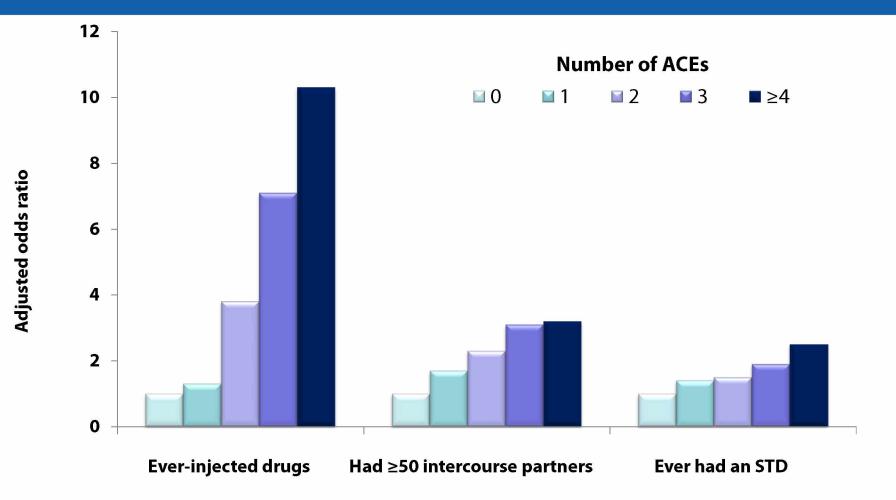
ACE, Adverse childhood experience Chapman, DP et al. Journal of Affective Disorders 2004;82:217–225 Gonzalez, O et al. MMWR 2010;59(38):1229-1235

ACE Score and Adult Cardiovascular Disease



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

ACE Score and HIV Risks

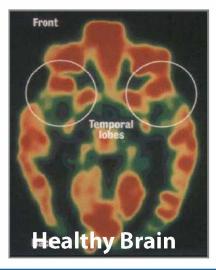


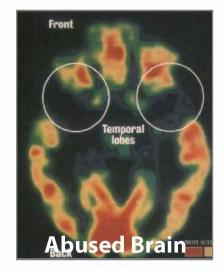
ACE, Adverse childhood experience Felitti, VJ et al. American Journal of Preventive Medicine 1998;14:245–258

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

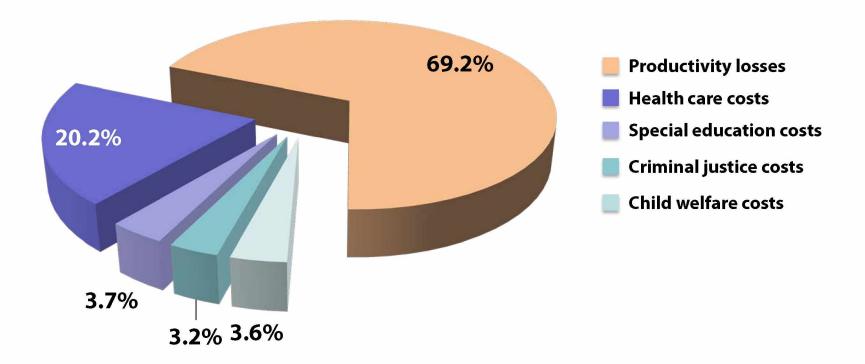




National Scientific Council on the Developing Child, Excessive Stress Disrupts the Architecture of the Developing Brain. Working Paper No. 3. [online] 2005 [cited 2006 Aug 10]. Available from: www.developingchild.net/reports.shtmlc

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

Economic burden



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



Fang X, et al. The economic burden of child maltreatment in the United States. Under review, 2011

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

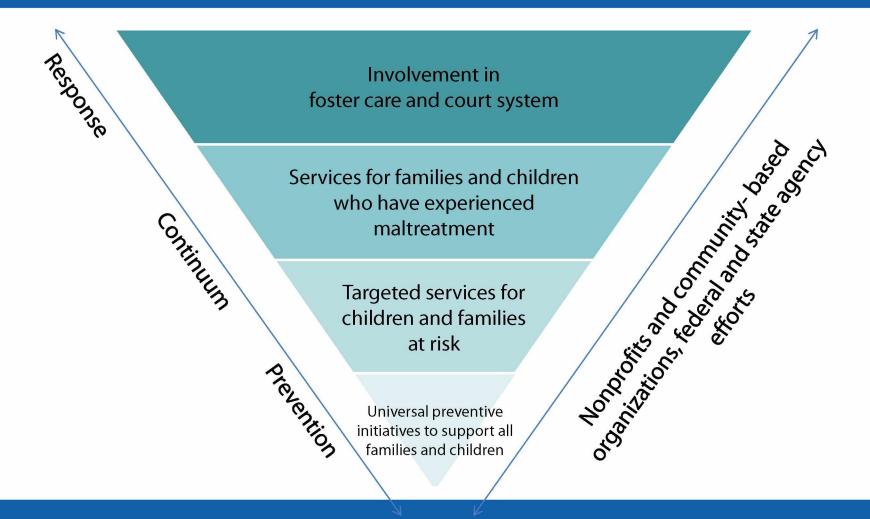
Prevention Works!



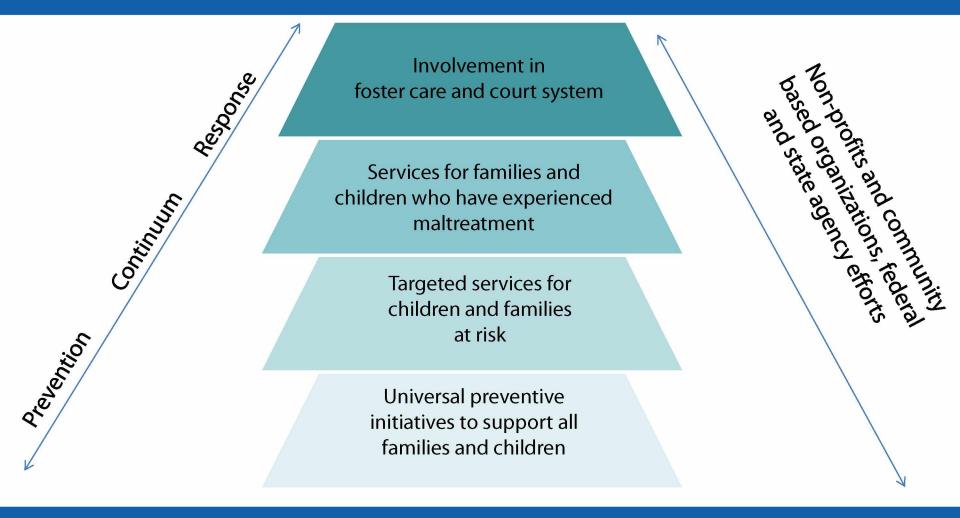
Janet R. Saul, PhD

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

 $http://www.cdc.gov/violenceprevention/pdf/CM_Strategic_Direction--Long-a.pdf$

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

http://www.cdc.gov/violenceprevention/pdf/CM_Strategic_Direction--Long-a.pdf

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

http://mchb.hrsa.gov/programs/homevisiting/index.html http://www.acf.hhs.gov/programs/ccb/initiatives/hvgp/index.htm http://www.supportingebhv.org

Prevention Works! Nurse Family Partnership

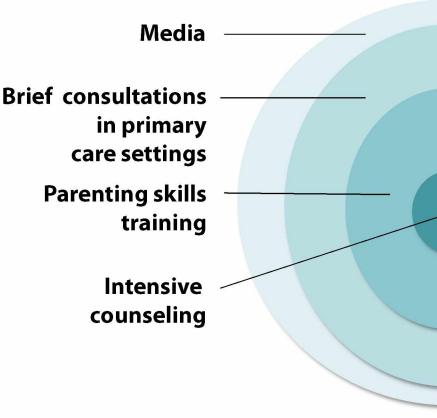
Nurse Family Partnership (NFP)

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

Evidence

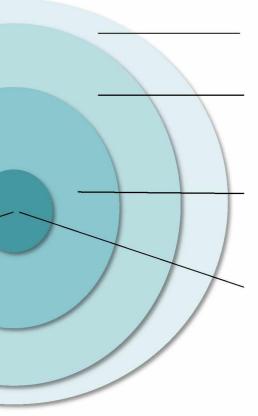
- 46% less child maltreatment in families participating in the Nurse Family Partnership than comparison families
- Decreased injuries requiring medical attention
- Benefit/cost ratio: \$6.10 in benefits to society for every \$1 in cost

Preventio Trip



http://www.triplep-america.com

on Works! ole P



Everybody

All families in a specific setting

Families at risk

Families in crisis

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

http://www.triplep-america.com/ Foster, EM et al. Children and Youth Services Review 2008;30(5):493-501 Benefit/Cost analysis conducted by Division of Violence Prevention, CDC

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)
- \geq Involvement in the state strategic plan (n=16)
- Mandated participation of public health (n=19)



Widely implement what works

Build a Prevention Support System through Public Health Prevention Leadership

Fill Knowledge Gaps

Changing community and societal risk factors

Evaluating policy and environmental interventions

SSNRs, Safe, stable, and nurturing relationships

SSNRs for ALL children

STOP child maltreatment

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

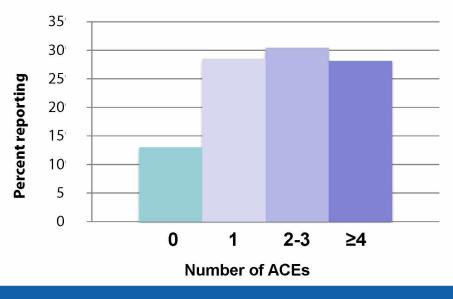
- > FL: 11.3/1,000
- > USA: 9.3/1,000

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



http://www.dcf.state.fl.us http://www.doh.state.fl.us

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

🖵 ln 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</p>
- > 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

Sedlak and Broadhurst. U.S. Department of Health and Human Services, National Center on Child Abuse and Neglect. Third National Incidence Study of Child Abuse and Neglect: Final Report (NIS-3) Washington, D.C. Government Printing Office, September 1996.

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 <u>and</u> 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 financ al 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)

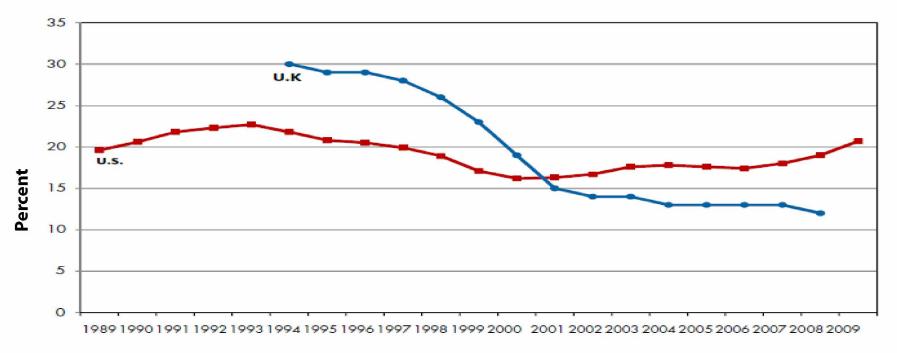
	All Ages	Children
Making work pay credit	1.6	0.5
Child tax credit expansion	1.0	0.6
EITC expansions	0.5	0.3
Food stamp increase	1.1	0.5
Unemployment insurance extension	0.7	0.2
Unemployment Ins: additional \$25/ week	0.1	0.03
\$250 payments	0.6	0.06

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

Arloc Sherman. Stimulus Keeping 6 Million Americans Out of Poverty in 2009, Estimates Show , The Center on Budget and Policy Priorities, September 9, 2009. http://www.cbpp.org/cms/index.cfm?fa=view&id=2910

Strengthening Families by Addressing Poverty

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



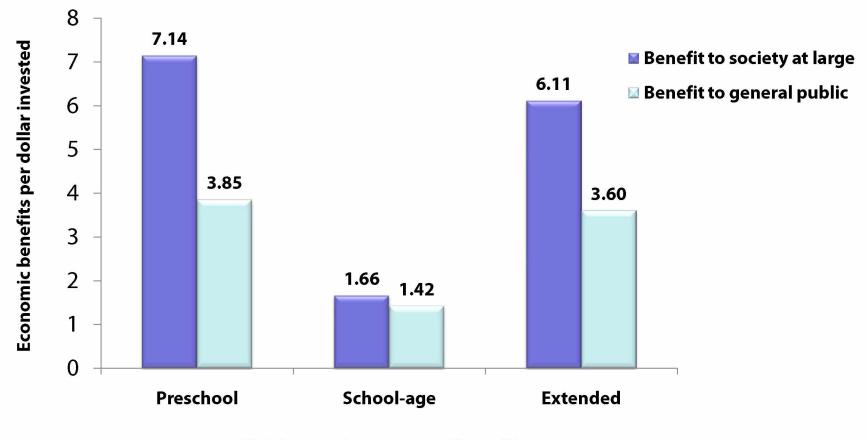
U.S.: Percent of all persons under 18 years below official US Poverty Line, 1989–2009 (~35% of median income in 2000)



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

Waldfogel J. Tackling child poverty and Improving child well-being: Lessons from Britain, First Focus, Foundation for Child Development, 2010

Family Strengthening Policies



Child-parent center cost/benefits

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. <u>http://aspe.hhs.gov/hsp/05/child-maltreat-resp/report.pdf</u> <u>http://www.childwelfare.gov/pubs/issue_briefs/differential_response/differential_response.pdf</u> <u>http://www.dhs.state.mn.us/main/idcplg?ldcService=GET_DYNAMIC_CONVERSION&dDocName=id_001627&RevisionSelectionMethod=LatestReleased</u> Differential Response System (DRS), State of CT, Department of Children and Families, <u>http://www.ct.gov/dcf/cwp/view.asp?a=3741&Q=439746</u> Rightsizing Congregate Care: A Powerful First Step in Transforming Child Welfare Systems, The Annie E. Casey Foundation, 2009 55 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





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