

# What is a Public Health Approach & What does it Mean for Project LAUNCH Grantees?

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(Special thank you to Dr. James Mercy, CDC Division of Violence Prevention)

Project LAUNCH Grantees Meeting, Thursday, Jan. 14, 2010



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“The findings and conclusions in this presentation are those of the author and do not necessarily represent the OFFICIAL POSITION of the Centers for Disease Control and Prevention.”



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# Public Health & Project **LAUNCH** Guiding Principles



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# The LAUNCH Guiding Principles

- A public health approach
- An ecological perspective
- A holistic approach



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# Project LAUNCH Strategies

- Evidence-based prevention & promotion
- Community involvement: cross-training, workforce development, & communications
- Cross-sector collaboration & systems integration
- Family-centered & culturally competent



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# Public Health Approach



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# What is Public Health?

- Population approach
  - Community as client
- Proactive and preventative
  - Health protection & promotion
- Programs, policies, capacity building, services, and research/evaluation
- Multidisciplinary
- Ecological*
- Holistic*



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# The 10 Essential Elements of Public Health

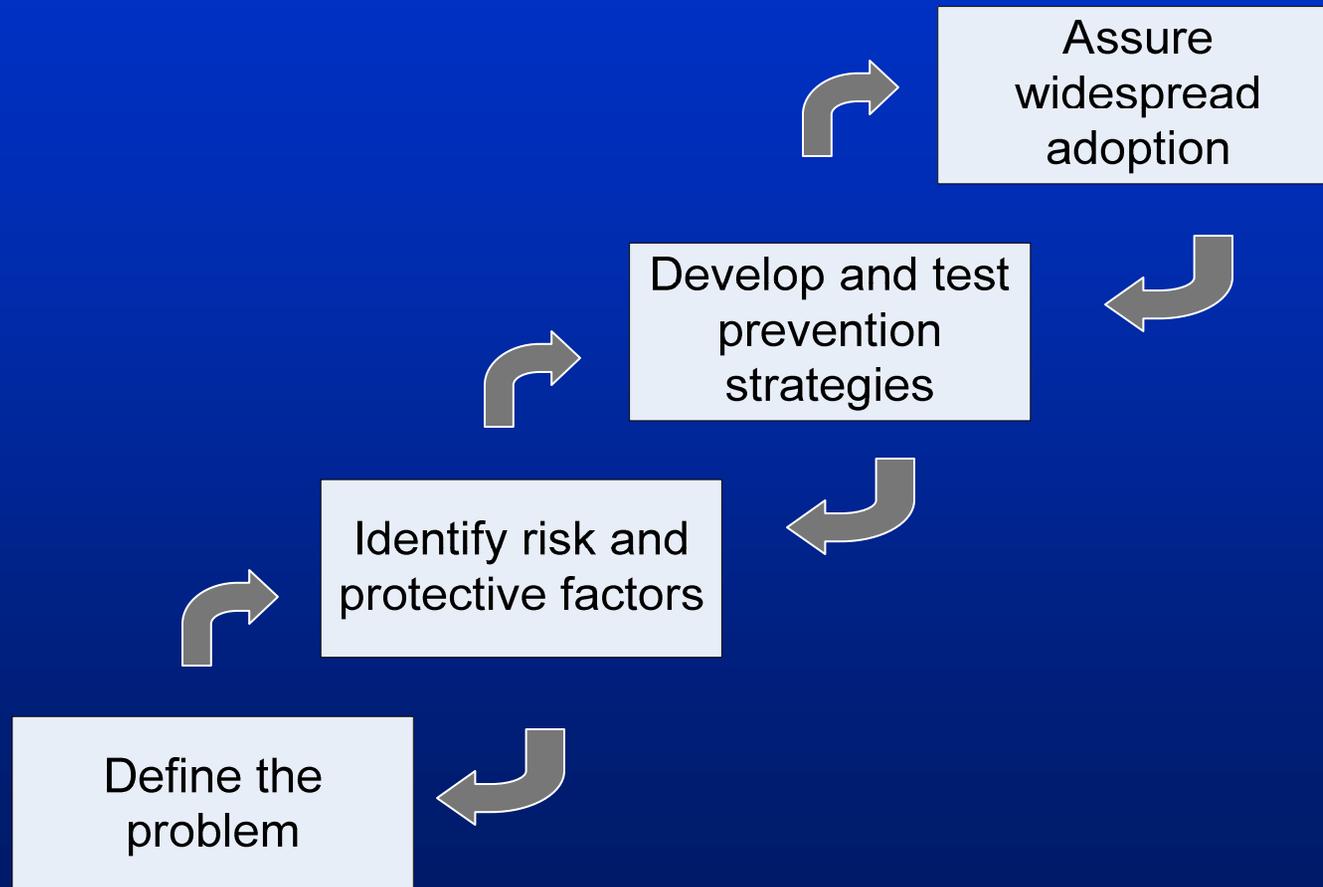
*Public Health has identified the following 10 essential elements that define public health practice:*

1.	Monitor health status to identify community health problems*
2.	Diagnose and investigate health problems and health hazards in the community
3.	Inform, educate, and empower people about health issues
4.	Mobilize community partnerships to identify and solve health problems
5.	Develop policies and plans that support individual and community health efforts
6.	Enforce laws and regulations that protect health and ensure safety*
7.	Link People to needed personal health services and assure the provision of health care when otherwise unavailable
8.	Assure a competent workforce for public health and personal health care
9.	Evaluate effectiveness, accessibility and quality of personal and population based services
10.	Research for new insights and innovative solutions to health problems*

Public Health Functions Steering Committee (1995)<sup>1</sup>



# The Public Health Model<sup>2</sup>



Adapted from Mercy et al. (1993)



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# CIOS with Early Childhood/Parenting Related Activities

CDC

Office of Public Health  
Preparedness and Response

Deputy Director  
Office of State and Local  
Support

National Institute for  
Occupational Safety and  
Health

National Center for Health  
Statistics  
Health Interview Statistics  
Health Nutrition Examination  
Survey  
Vital Statistics

Office of Surveillance,  
Epidemiology, and Laboratory  
Services  
Knowledge Management  
Services  
Alliance Management  
Emergency Preparedness  
Informatics Shared Services  
Integrated Surveillance

National Center on Birth Defects  
and Developmental Disabilities  
Child Development Studies  
Early Hearing Detection and  
Intervention  
Disability and Health  
Blood Disorders  
Developmental Disabilities  
Prevention Research

National Center for Chronic  
Disease Prevention and Health  
Promotion  
Nutrition Physical Activity  
Diabetes  
Smoking  
Reproductive Health  
Oral Health  
Cancer Prevention  
Adult and Community Health  
Adolescent and School Health  
Public Health Genomics

National Center for  
Environmental Health/Agency  
for Toxic Substances and  
Disease Registry  
Environmental Hazards and  
Health  
Emergency Health  
Laboratory Services

National Center for Injury  
Prevention  
Unintentional Injury  
Violence Prevention  
Injury Response

National Center for Immunization  
and Respiratory Diseases  
Bacterial Disease  
Viral Disease  
Immunization Services  
Influenza

National Center for Emerging  
and Zoonotic Infectious Diseases  
Parasitic Disease  
Food borne, Bacterial, Mycotic  
Disease  
Viral Rickettsial Disease

National Center for HIV/AIDS,  
Viral Hepatitis, STD and TB  
Prevention  
Viral Hepatitis  
HIV AIDS Prevention  
STD Prevention  
Global AIDS  
TB Elimination  
HIV AIDS Surveillance &  
Epidemiology

Center for Global Health  
*Global Migration and  
Quarantine  
Global AIDS*

# Prevention Science & Child Wellbeing<sup>3-4</sup>

- Prevention efforts aim to increase protective factors & reduce risk factors
- Risk & Protective factors
  - Are often non-specific
  - Are correlated & cumulative
  - Change with development
  - Exist in multiple contexts
  - Key to the success of intervention and prevention efforts



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**Risk=**  
**Poverty**  
**Maternal**  
**Depression**

**Protective=**  
**Nurturing**  
**Relationship**  
**Social**  
**Support**



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# Mental Health Intervention Spectrum<sup>4</sup>

- **Health promotion-** “enhance individual’s ability to achieve developmentally appropriate task & a positive sense of self-esteem, mastery, well being, & social inclusion, strengthen ability to cope with adversity”
- **Universal prevention-** entire population eligible
- **Selective prevention-** above average risk group
- **Indicated prevention-** high risk, signs or systems but subclinical



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# Mental Health Intervention Spectrum

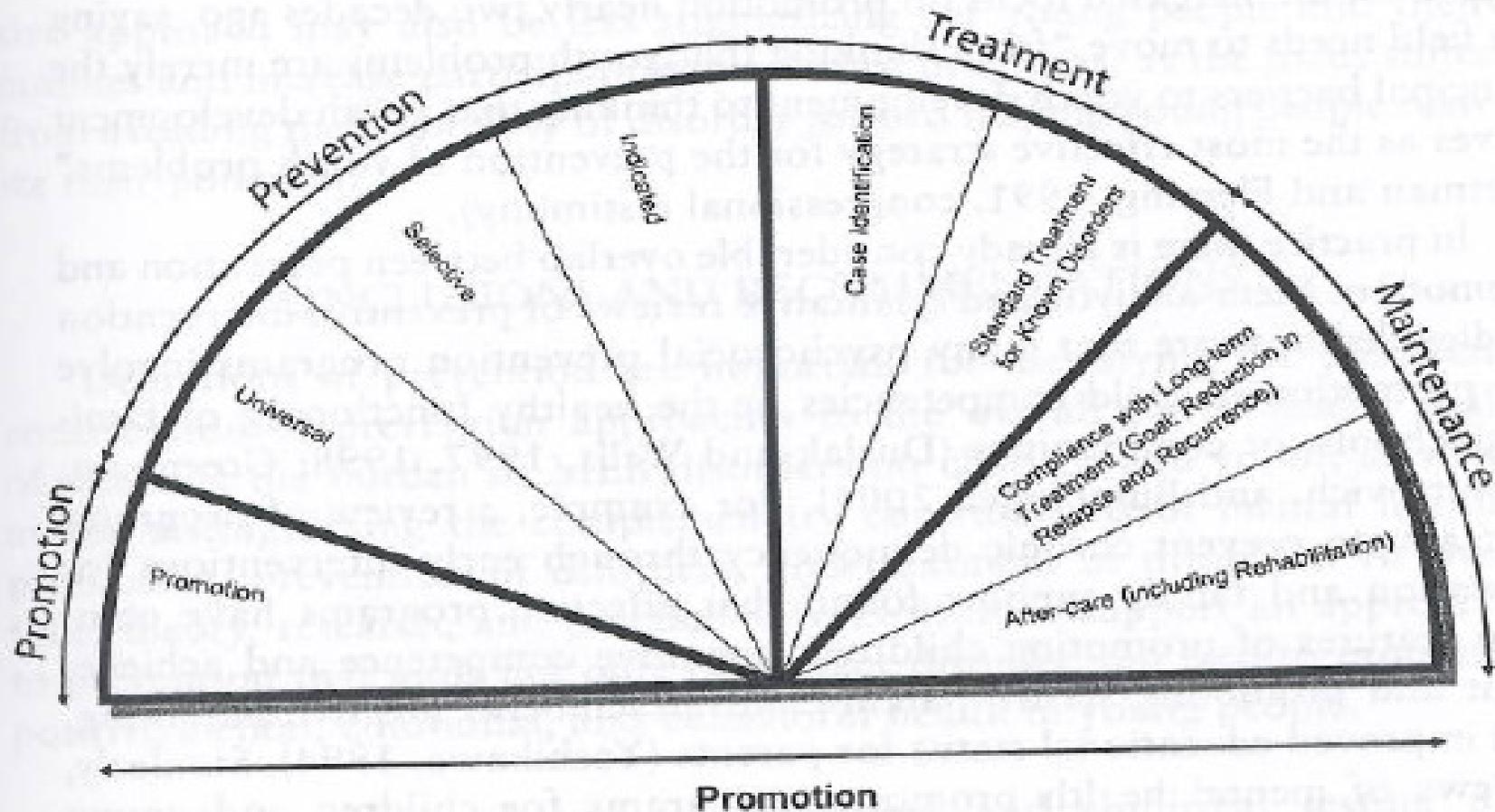
- **Treatment-** reduce the length of time the disorder exists and reduce co-morbidity
- **Intervention Maintenance-** supportive, instructional, or pharmacological long-term support to reduce disability



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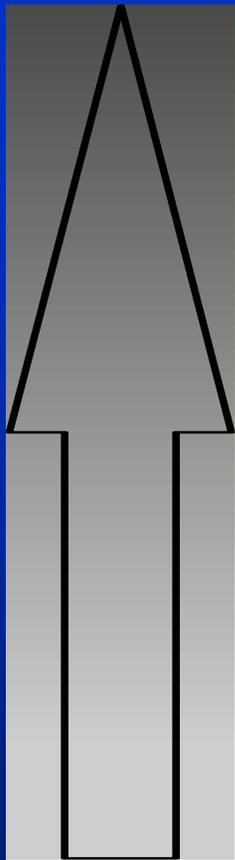
# IOM (2009)<sup>4</sup>



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**High Risk**



**Treatment/  
Intervention**

**Indicated  
Prevention**

**Selective Intervention**

**Universal Prevention**

**Health Promotion**

**Low Risk**

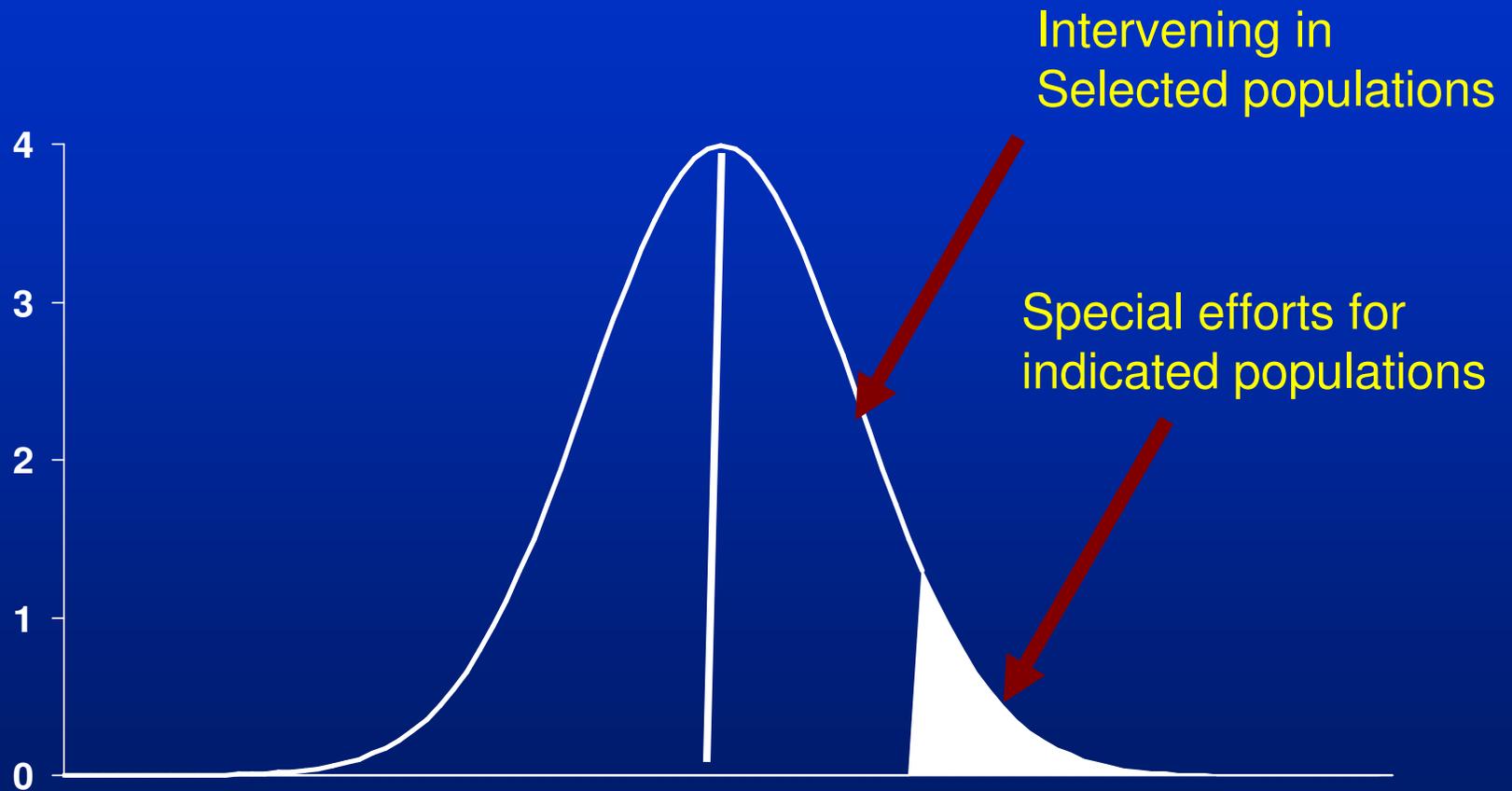
**Level of Prevention & Associated Risk Level**



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# Prevention among High-risk Individuals

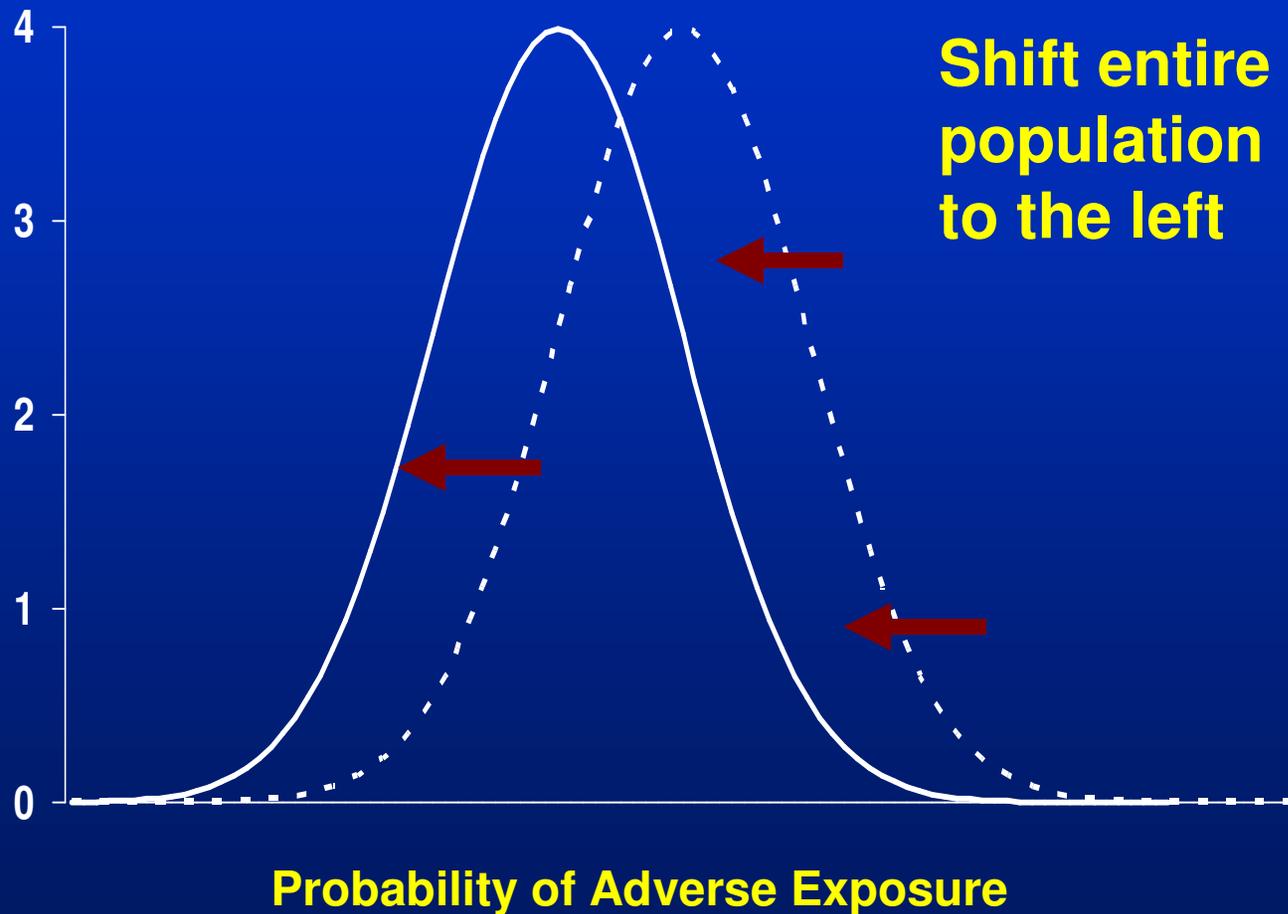


Probability of Adverse Exposures

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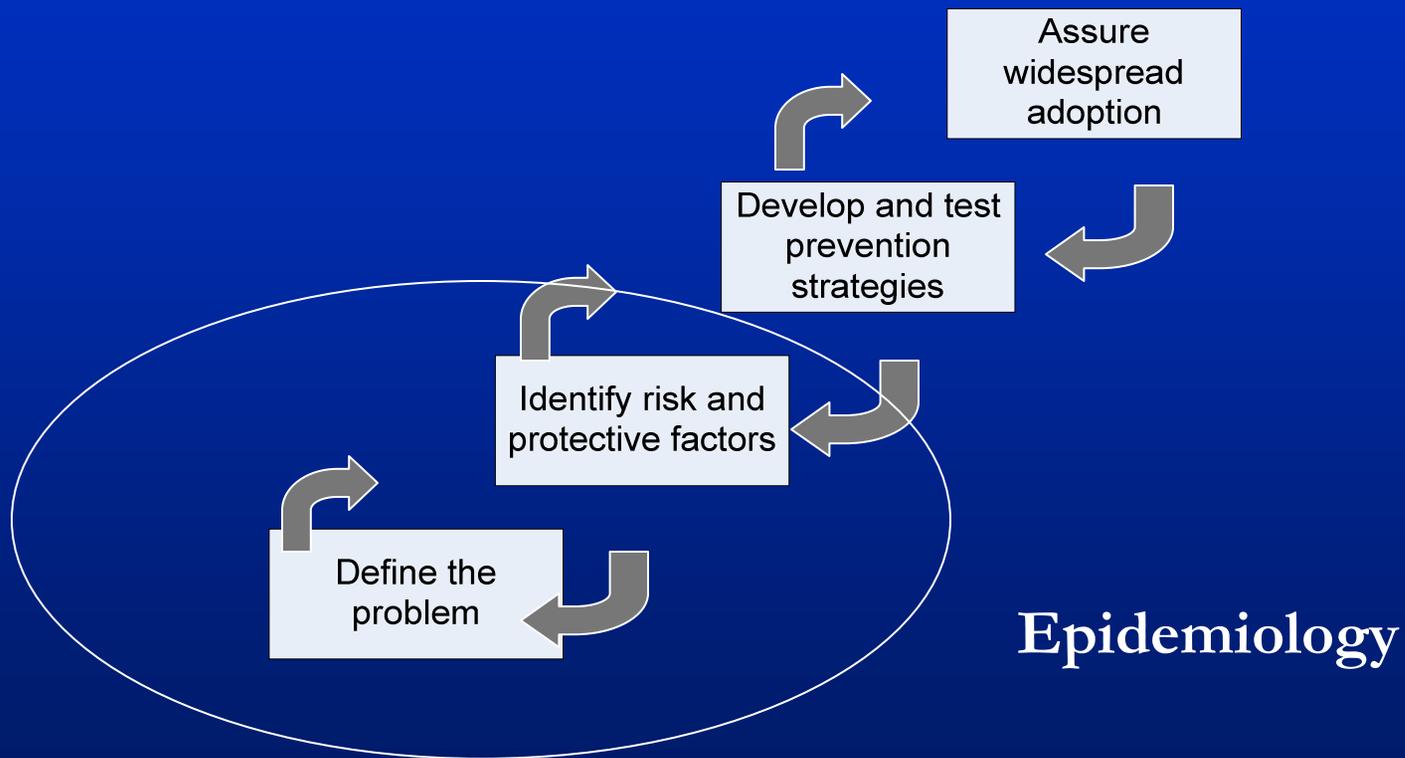
# Universal Prevention Approach



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# The Public Health Model



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# Some Examples of CDC Child/Family Epidemiology

- ADHD PLAY Study
- Pregnancy Risk Assessment Monitoring System
- Autism & Developmental Disabilities Monitoring Network
- Early Hearing & Detection Intervention
- Adverse Childhood Experiences Study (ACE)
- Childhood Lead Level Surveillance
- Meta-analysis of Parent Training Programs



PLAY

Project to Learn about ADHD in  
Youth



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# National Survey of Children's Health

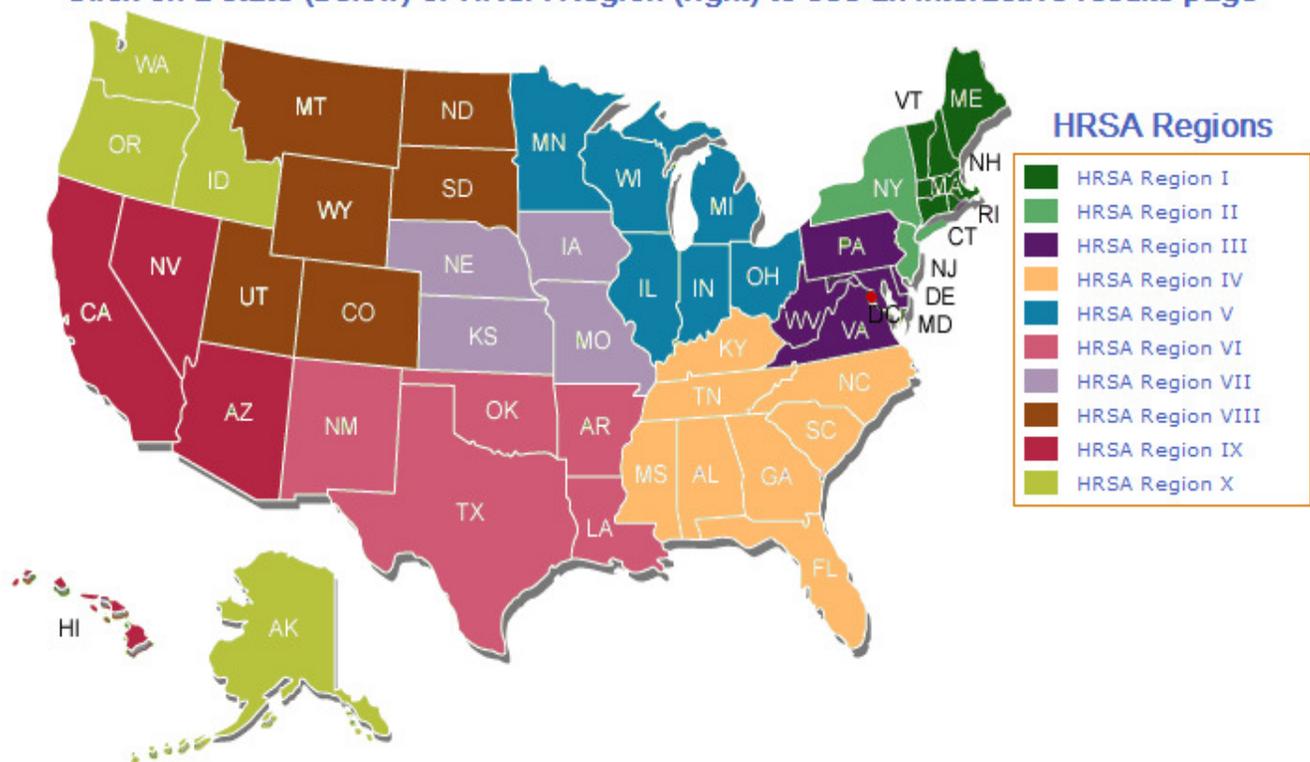
Data Resource Center — Your Data... Your story

- Home
- Tutorial
- About Us
- Contact Us
- Search

- Start a Data Query
- National & State Profiles
- Special Topics
- How to Use This Site
- Presentations/Articles
- Survey Information
- FAQ
- Useful Resources

## 2003 NSCH National Chartbook State Pages

Click on a state (below) or HRSA Region (right) to see an interactive results page



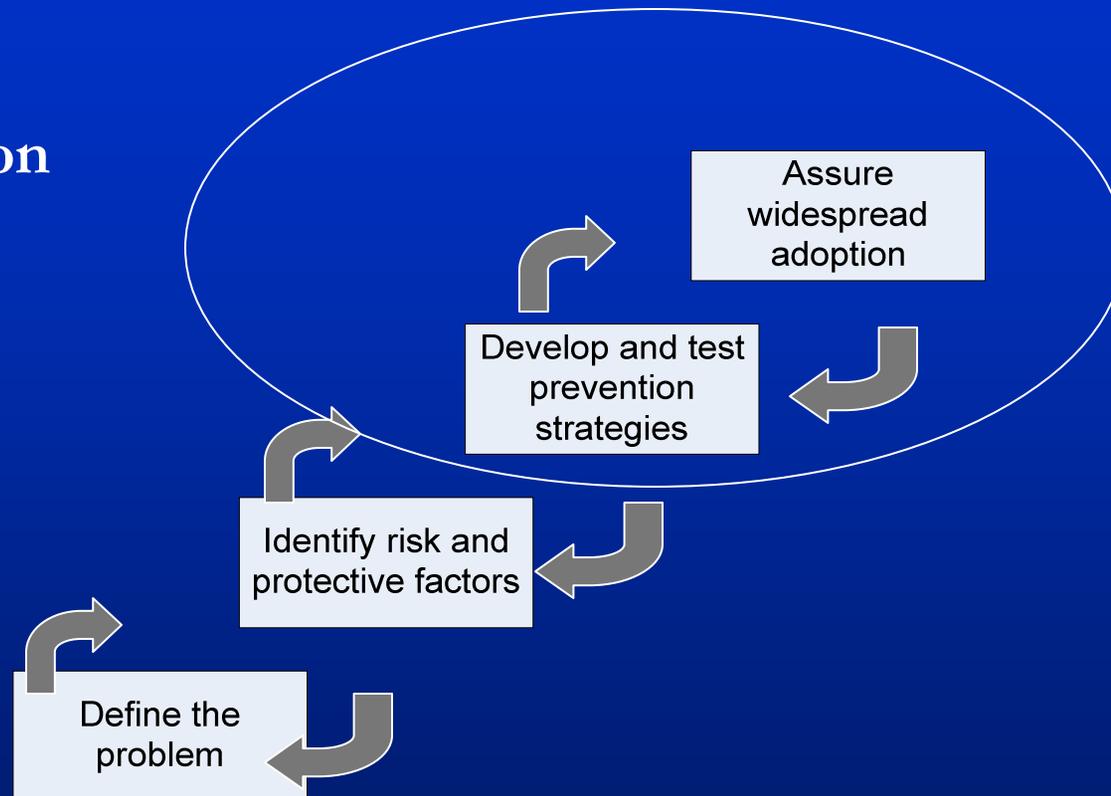
- SIGN UP FOR E-UPDATES
- ASK A QUESTION
- REQUEST A DATASET
- TELL A FRIEND

### YOUR BRIEFCASE



# The Public Health Model

Prevention



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# Sample CDC Child-Family Prevention Programs

- Project Choices
- Eagle Books for Diabetes Prevention
- Project Connect
- Fruits & Veggies Matters
- Learn the Signs. Act Early
- Legacy for Children™



Learn the Signs.  
Act Early.



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# Learn the Signs. Act Early.



**It's time to change  
how we view a child's growth.**

It's natural to measure your child's height and weight. But you should measure other ways your child is growing, too.

From birth to 5 years, there are milestones your child should reach in terms of how she plays, learns, speaks, and acts. A delay in any of these areas could be a sign of a developmental problem, even autism. The good news is, the earlier it's recognized the more you can do to help your child reach her full potential. Talk with a doctor or nurse about your child's total development.

1-800-CDC-INFO    [www.cdc.gov/actearly](http://www.cdc.gov/actearly)

**Learn the Signs. Act Early.**

Age	Milestones
3 years	shows affection for playmates uses four- to five-word sentences
2 years	points to object when named imitates adults (claps after adult claps)
18 months	points to interesting objects plays pretend (talks on toy phone) uses simple gestures (waves "bye bye") makes sounds (such as "ma" and "ba")

- Builds on familiar experiences of parents, such as monitoring their child's growth
- Aims to educate parents, health care professionals, and childcare providers about child development
- Encourages early screening and intervention—strategies that hold the most promise for affected children and their families



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# Learn the Signs Resource Kits

**It's time to change how we view a child's growth.**

**4 feet**

**5 years**

**4 years**

**3 years**

**2 years**

**18 months**

**1 year**

**1 foot**

**Learn the Signs. Act Early.**

**Some signs of development are obvious. Algunos muestran del desarrollo son obvios.**

**Some are not so obvious. Algunos no son tan obvios.**

**It's time to change how we view a child's growth.**

Every day you see them reach milestones. This CD will help you spot a few more.

**Learn the Signs. Act Early.**

**Every day you see them reach milestones. This CD will help you spot a few more.**

Illustration of a child reaching a milestone.

**Learn the Signs. Act Early.**

**It's time to change how we view a child's growth.**

3 years: shows affection for playmates, uses four- to five-word sentences, points to object when named, imitates adults (claps after adult claps), points to interesting objects, plays pretend (talks on toy phone).

2 years: uses single gestures (waves 'bye-bye'), notes sounds (suck, eat, and 'ba').

18 months: uses simple gestures (waves 'bye-bye').

**Learn the Signs. Act Early.**

**Her first tooth! And she's babbling!**

**It's time to change how we view a child's growth.**

From birth to 5 years, there are thousands of little milestones in terms of how they play, learn, speak, and act. A delay in any of these could be a sign of a developmental problem, even autism. Fortunately, the earlier a delay is recognized, the more you can do to help your child reach her full potential.

To request a FREE kit, visit [www.cdc.gov/actearly](http://www.cdc.gov/actearly).

**Learn the Signs. Act Early.**

**Developmental Screening FACT SHEET**

**Important Milestones By The End Of 2 Years (24 Months)**

**Autism Spectrum Disorders FACT SHEET**

**Learn the Signs. Act Early.**

[www.cdc.gov/actearly](http://www.cdc.gov/actearly)

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# Legacy for Children™

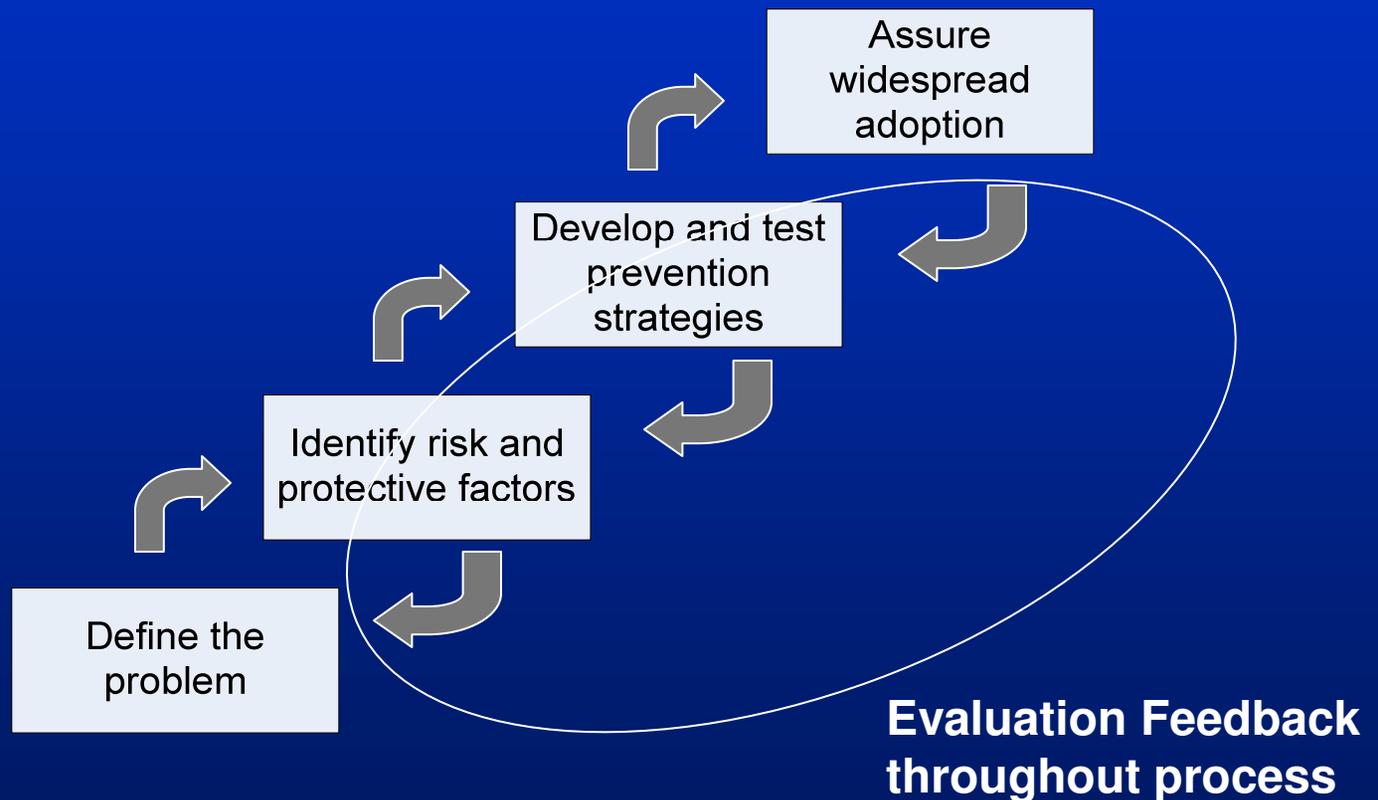
- Improve outcomes for children in poverty to promoting adaptive parenting
- Legacy mechanisms:
  - Mother-Child Interaction
  - Enhancing parental self efficacy
  - Promoting a sense of community
- Evaluation
  - Preliminary analysis are promising
  - Longitudinal evaluation in progress
- Resources



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# The Public Health Model



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# Evaluation

- Evaluation feedback at every step
- Program Evaluation
  - the goal of rigorous evaluation is to rule out alternative explanations (aka “threats to internal validity”) for observed outcomes
  - Technology Enhancements to Parenting Programs
  - Improving Training of Home Visitation Programs



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# Ecological Framework



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# Ecological Model: Parent-related Risk Factors for Poor Child Development

## ■ Individual

- Young age mother at birth
- Negative maternal attitude toward pregnancy
- Depression
- Low self-esteem

## ■ Community

- Poor neighborhoods
- Lack of coherent family support system

## ■ Family

- Single parent family
- Large family
- Marital conflict
- Chaotic and unpredictable family system
- Family poverty
- Disengaged parenting style
- Authoritarian parenting style
- Poor mother-infant bond

## ■ Societal

- Culturally sanctioned values and practices



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# Examples of Public Health Relevant Approaches to Child Health Across the Social Ecological Model<sup>5</sup>

## Examples

- Maternity/Paternity Leave

Societal

Community

Relationship

Individual

## Examples

- Parents Matter Program
- School Connectedness
- MH Consultation

## Examples

- Parent Training

## Examples

- Home visitation
- Legacy for Children™
- Project Choices



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# Ecological Model in Action: Triple P

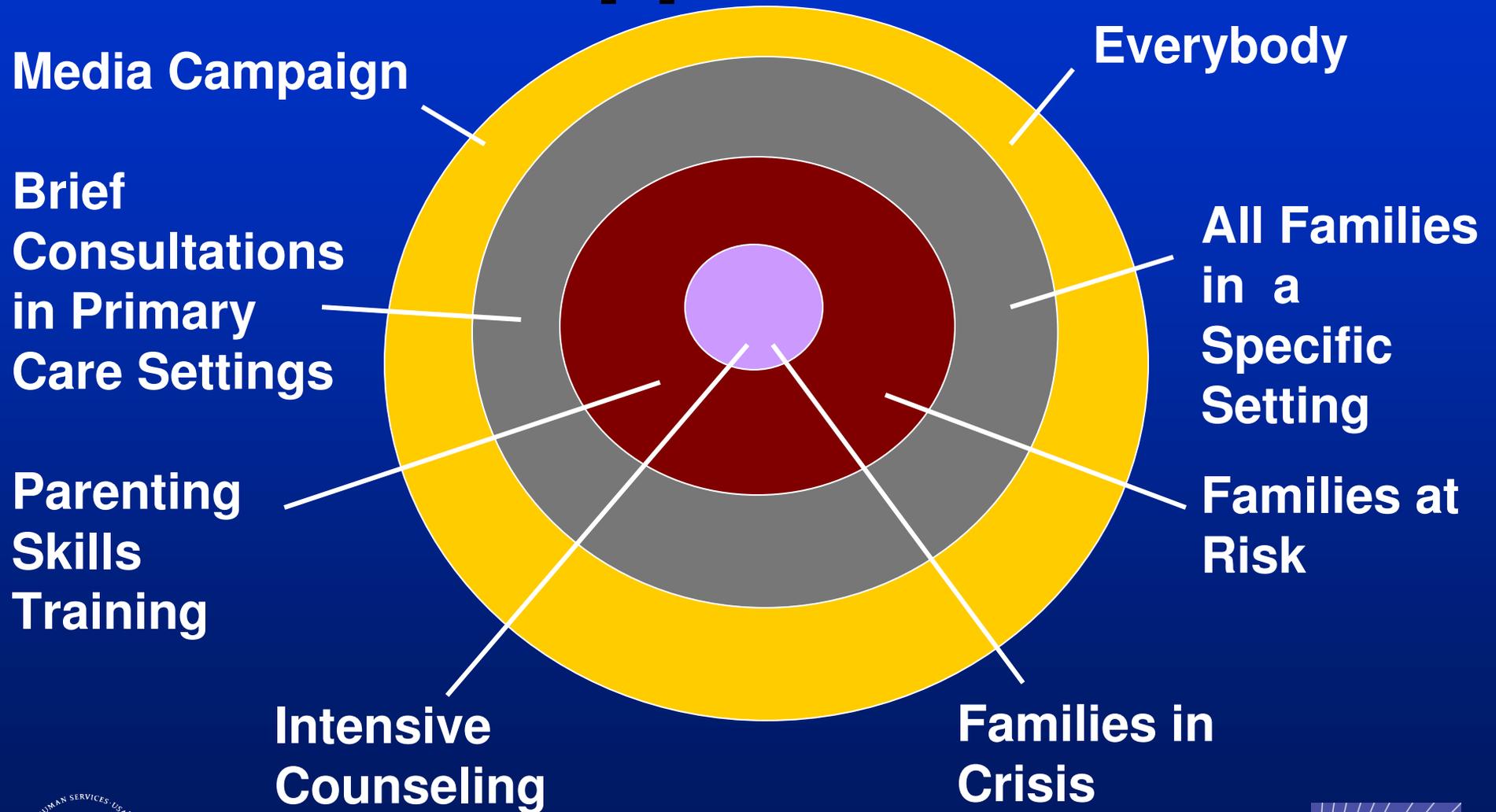
- Randomized population-level trial
- Implemented Triple P in 9 counties in SC
  - Train providers (n = 649)
  - Conduct media campaign
- Results for Triple P counties:
  - Smaller increases in substantiated child maltreatment cases
  - Reductions in out of home placements
  - Reductions in child hospitalizations and ER visits due to CM injuries



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# Triple P: Population-based Approach



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# Holistic Approach



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# Children's Early Brain Development Shapes Lifelong Health<sup>6</sup>



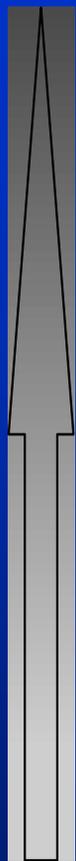
- Origins of chronic adult disease are often found among developmental & biological processes occurring during the early years
- Because brain circuits stabilize over time, the energy costs of altering circuits (and therefore behavior) increase as the brain matures



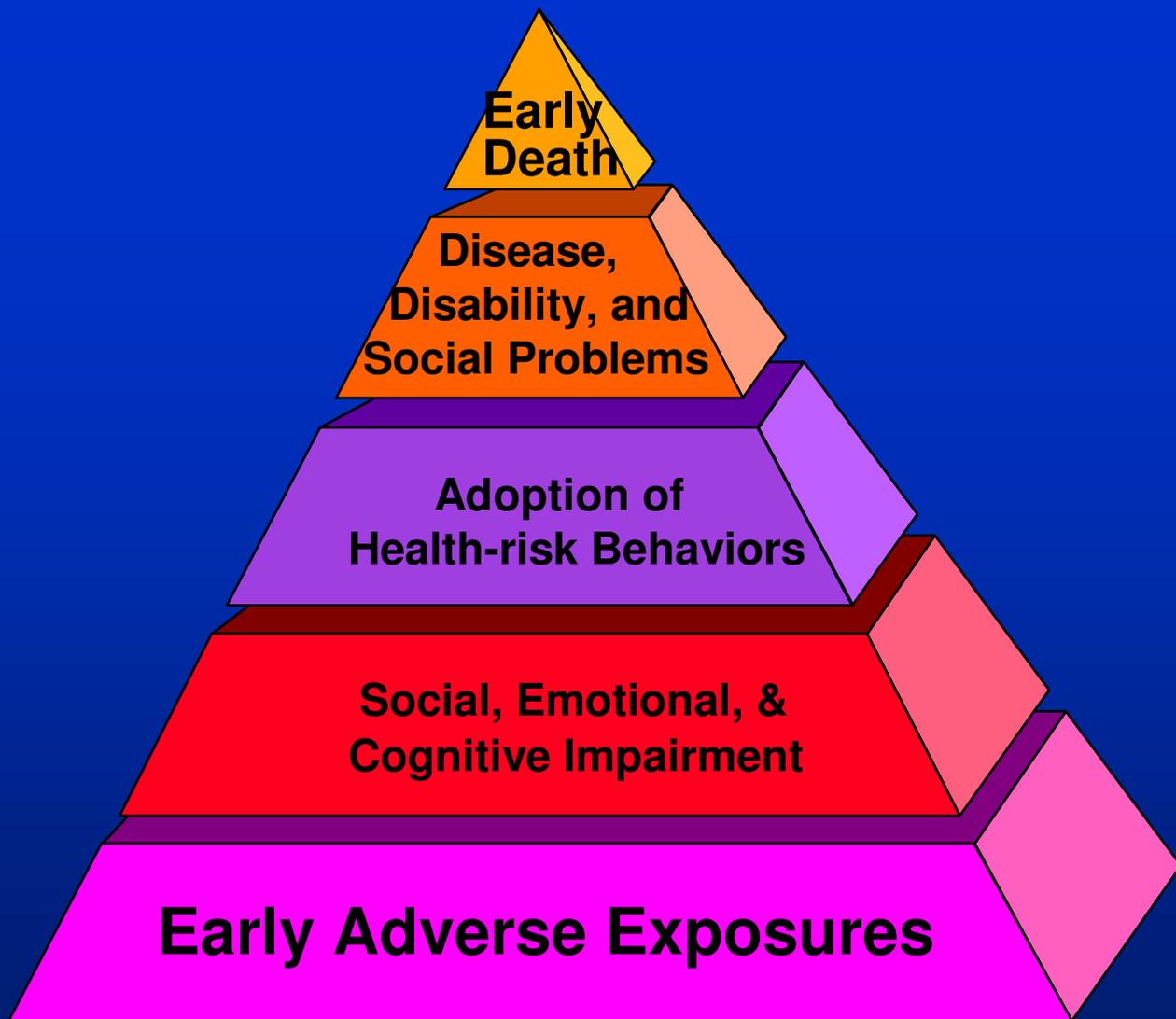
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**Death**



**Birth**



**Early Adverse Exposures Throughout Life:**

**The ACE Study**

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# Consequences of Early Adverse Exposures

**Early  
Adverse  
Exposures**

## Health-risk behaviors

Sexual promiscuity  
Sexual perpetration  
Alcohol abuse  
Illicit/injected drug use  
Smoking  
Behavior problems

## Mental/Social Problems

PTSD  
Depression  
Anxiety  
Eating disorders  
Academic achievement  
Unwanted pregnancy  
Obesity  
Revictimization

## Disease and Injury conditions

Ischemic heart disease  
Diabetes  
Stroke  
Cancer  
Suicide  
Skeletal fractures  
Chronic bronchitis/  
emphysema  
STDs (e.g., HIV)  
Hepatitis



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# CDC Resources



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SEARCH

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## Parent Portal

Welcome to the CDC Parent Portal! Here you will find a wealth of information from across all of CDC, covering everything from safety at home and the community to immunization schedules and developmental milestones. Let the CDC Parent Portal help you keep your child healthy and safe!



Parent Portal >>

H1N1 Flu

Babies & Toddlers

Text size: [S](#) [M](#) [L](#) [XL](#)

[Email page](#)

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### Pregnancy



This page will help you learn how to be healthy **before, during, and after** pregnancy, and give your baby a healthy start to life.

[More >>](#)

### Infants & Toddlers (Ages 0-3)



If your **child** is age three or younger, this page is meant for you. This page will help you give your child a healthy start to life.

[More >>](#)

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# Podcasts



<http://www2c.cdc.gov/podcasts/>

**Podcasts are also available in Spanish!!!**

<http://www.cdc.gov/spanish/podcast.html>



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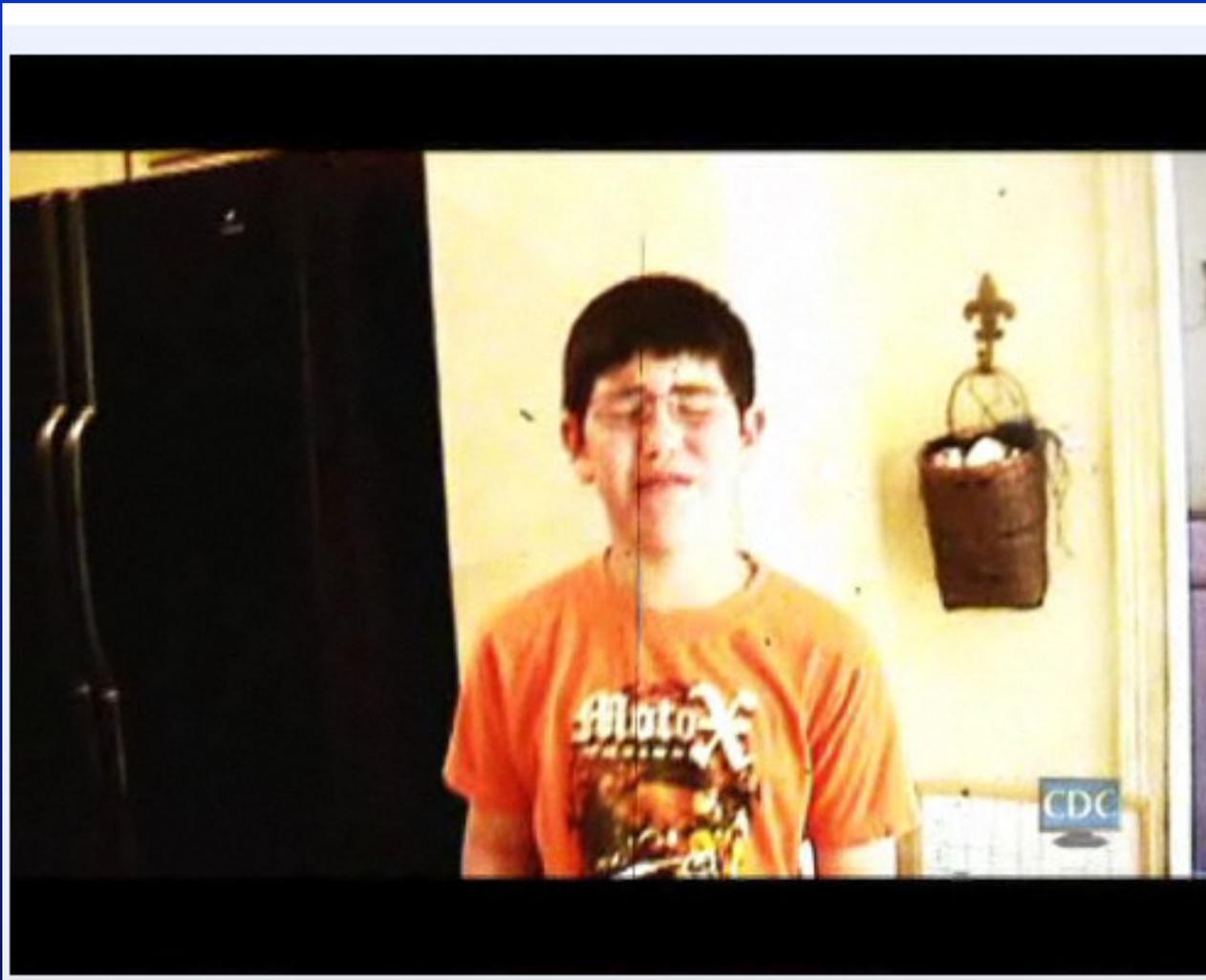
# Example Child Development Video



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# Example Fetal Alcohol Syndrome Video

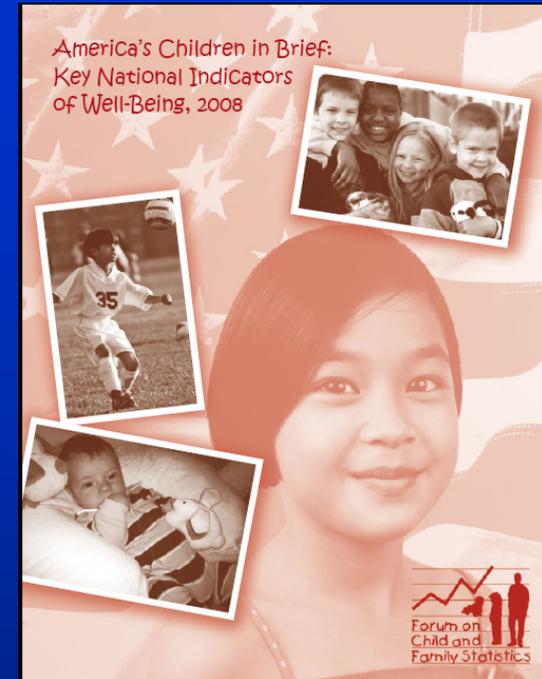


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# National Center for Health Statistics (NCHS)

- *Health U.S.*
- *America's Children*
- Health E-stats (web only)
- FASTSTATS (web only)
- Advance data/Data briefs
- *MMWR*
  - National Notifiable Disease System



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# Interactive data access tools on CDC website

- National Survey of Children's Health – Data Resource Center
- Health Data for All Ages
- VitalStats
- WISQARS
- WONDER
- Healthy People Data2010
- NCHS Surveys Measures Catalog: Child and Adolescent Mental Health

<http://www.cdc.gov/nchs/datawh/datatools.htm>

NCHS website: <http://www.cdc.gov/nchs/>



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# CDC EHDI Activities

- Assist states and territories in the development of tracking and surveillance systems
- Provide technical assistance to states and territorial EHDI programs
- Supports research efforts to:
  - Identify causes of hearing loss
  - Determine developmental outcomes
  - Collect Information on referral rates from EHDI programs
  - Assess the effectiveness & cost of EHDI programs



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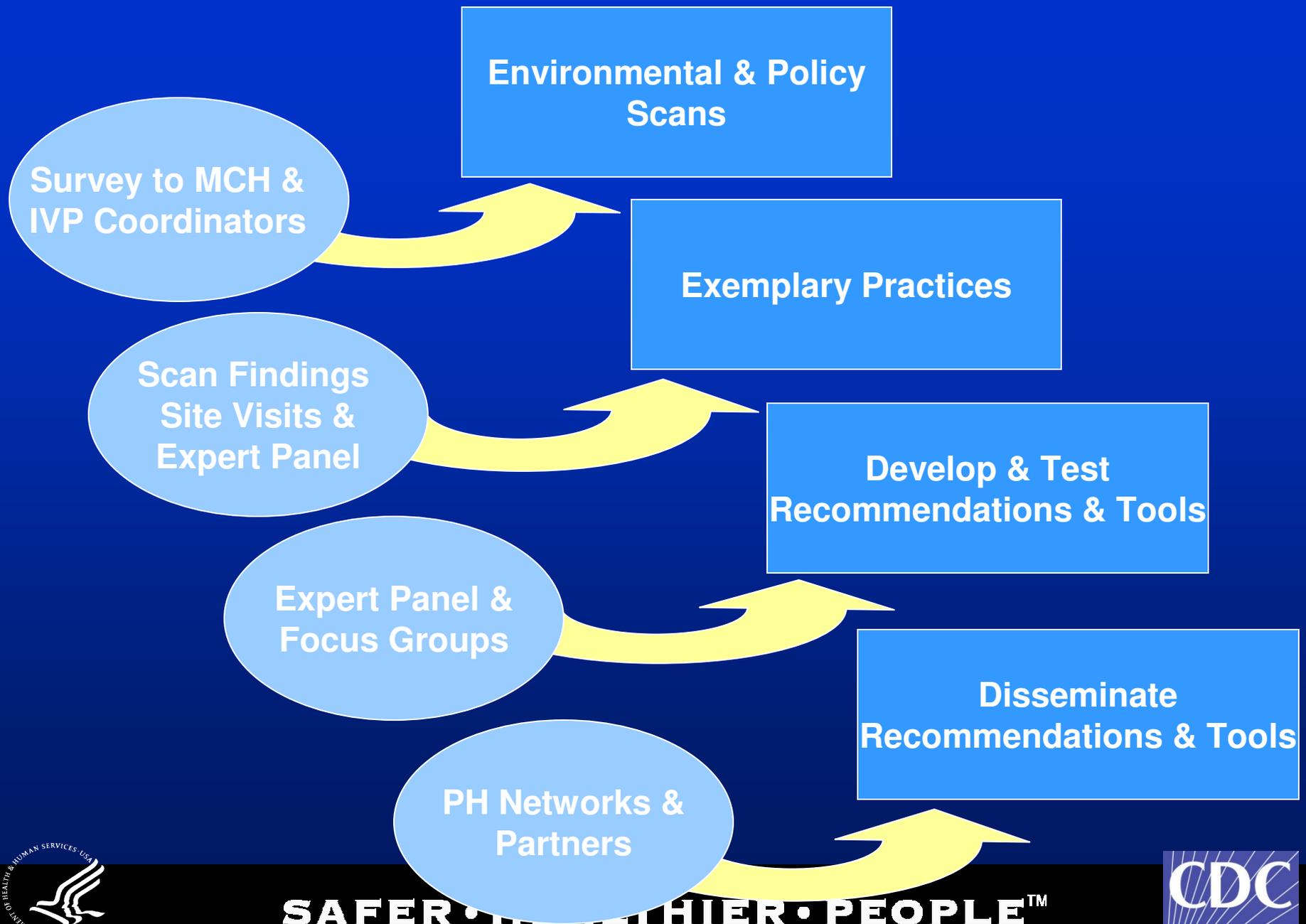
# Public Health Initiative

- **Environmental Scan** (Sept-Oct, 2009)
- **Identify Exemplary Practice States** (Dec, 2009)
  - **Site Visits** (Feb-May, 2010)
  - **Policy Scan** (Aug-Feb, 2009)
  - **Expert Panel Meeting** (Jul, 2010)
  - **Develop Rec. & Tools** (Jul 2010-Mar, 2011)
    - Focus Groups
  - **Disseminate Rec. & Tools** (Apr, 2011)



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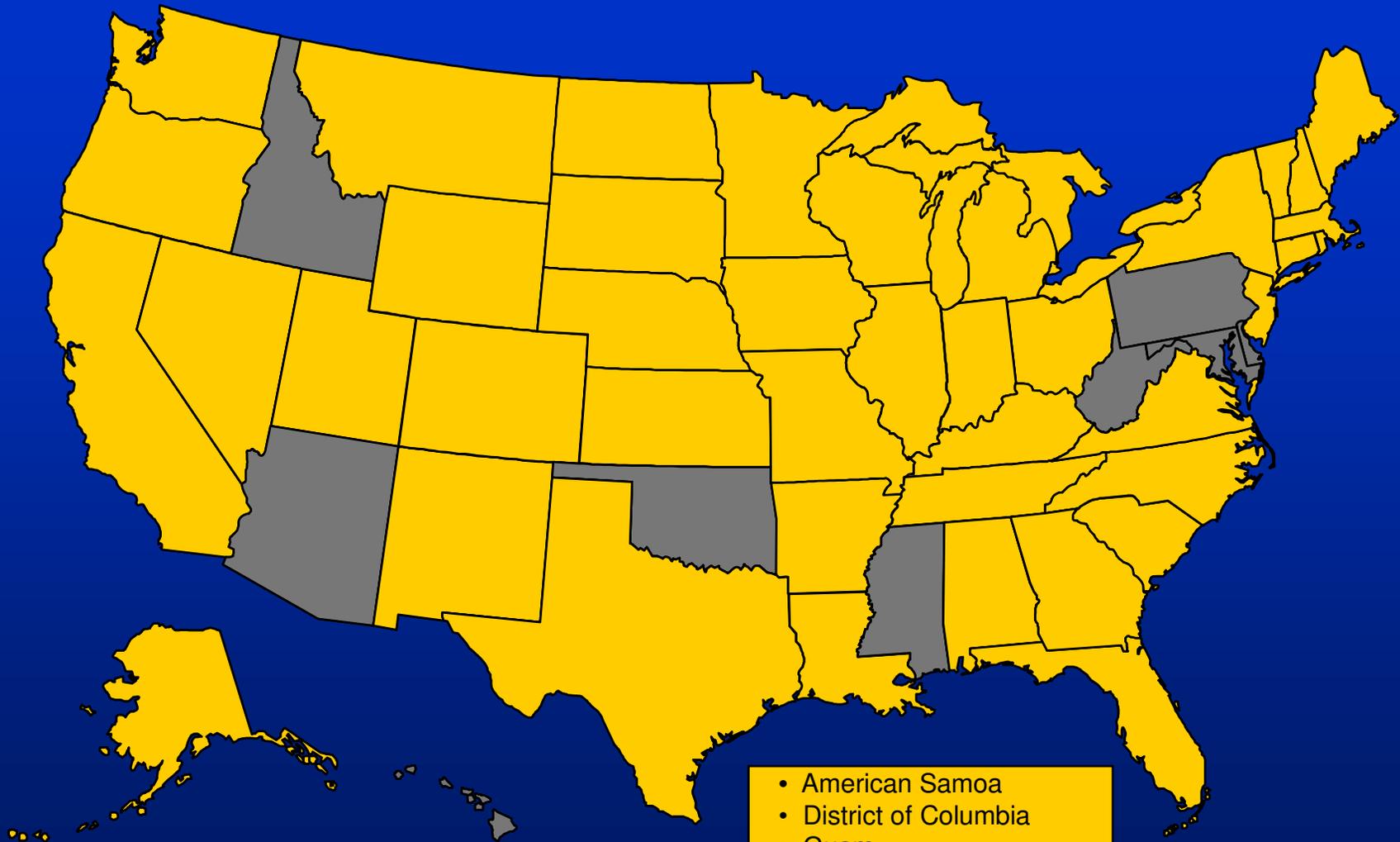
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# CDC Resources by Health Topic

- **American Indian Diabetes Prevention**
  - <http://www.cdc.gov/diabetes/pubs/eagle.htm>
  - <http://www.cdc.gov/diabetes/eagle/>
- **Asthma**
  - <http://www.cdc.gov/asthma/default.htm>
- **Child Maltreatment**
  - [www.cdc.gov/ncipc/dvp/CMP/default.htm](http://www.cdc.gov/ncipc/dvp/CMP/default.htm)
  - Hammond, W. R.; Haegerich, T.M.; Saul, J. The public health approach to youth violence and child maltreatment prevention at the Centers for Disease Control and Prevention. *Psychological Services*. Vol 6(4), Nov 2009, 253-263.
  - Leeb, R. T., Paulozzi, L., Melanson, C., Simon, T., & Arias, I. (2008). *Child maltreatment surveillance: Uniform definitions for public health and recommended data elements*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.

# CDC EHDI Cooperative Agreements



- American Samoa
- District of Columbia
- Guam
- Northern Mariana Islands
- Republic of Palau



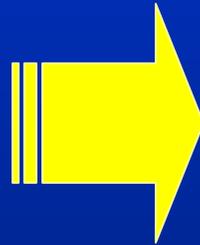
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# Activities of CDC's Fetal Alcohol Syndrome Prevention Team

## Prevention Activities:

- Monitoring alcohol use among women of childbearing age
- Educating women about the risks of alcohol use during pregnancy
- Developing, testing, and disseminating interventions for women at risk for having an alcohol-exposed pregnancy (e.g., Project Choices)
- Improving alcohol screening for women of childbearing age and provision of brief interventions or referral for those at risk



## Relevant Resources:

- Publications on rates and trends of alcohol use among women of childbearing age, including state-specific rates
- Prevention-focused brochures, factsheets, e-card for consumers
- Publications on evidence-based strategies to prevent alcohol-exposed pregnancies
- FASD Regional Training Centers

For more information and materials, go to: [www.cdc.gov/ncbddd/fas](http://www.cdc.gov/ncbddd/fas)



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- **Child Safety**

- [www.cdc.gov/safekid/](http://www.cdc.gov/safekid/)

- **Community Guide for Preventive Services**

- <http://www.thecommunityguide.org/> - *Evidence-based recommendations for programs and policies to promote population health*

- **Community Health**

- [www.cdc.gov/CommunityHealthResources/](http://www.cdc.gov/CommunityHealthResources/) - *On-line community health tool*

- <http://www.cdc.gov/healthycommunitiesprogram/tools/change.htm>

- **Developmental Disabilities**

- Autism Spectrum Disorders (Act Early Campaign)  
(<http://www.cdc.gov/ncbddd/actearly/index.html>)

- Cerebral Palsy/Hearing Loss/ Intellectual Disability/Vision Impairment (CDC) (<http://www.cdc.gov/ncbddd/dd/>)

- **Depression/Anxiety (Adult)**

- <http://www.cdc.gov/Features/Depression/>

- <http://www.cdc.gov/Features/dsBRFSSDepressionAnxiety/>

- **Disaster Mental Health**

- <http://www.bt.cdc.gov/mentalhealth/>

- **Early Hearing & Detection Intervention**

- [http://www.cdc.gov/ncbddd/ehdi/documents/EHDI\\_Contact.pdf](http://www.cdc.gov/ncbddd/ehdi/documents/EHDI_Contact.pdf)

- <http://www.cdc.gov/ncbddd/ehdi/edmaterials.html>

- <http://www.cdc.gov/ncbddd/ehdi/CDROM/index.html>

- **Evaluation**

- Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR 1999;48(No. RR-11).

- <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm>

- An Evaluation Framework for Community Health Programs  
<http://www.cdc.gov/eval/evalcbph.pdf>

- **Fetal Alcohol Syndrome**

- <http://www.cdc.gov/ncbddd/fasd/index.html>

- **Immunizations**

- <http://www.cdc.gov/vaccines/spec-grps/parents.htm>

- **Learn the Signs. Act Early/Developmental Screening**

- [www.cdc.gov/ncbddd/actearly/](http://www.cdc.gov/ncbddd/actearly/)

- **Lead Poisoning**

- [www.cdc.gov/nceh/lead/](http://www.cdc.gov/nceh/lead/)

- **Mental Health/Behavioral (Children)**

- ADHD (CDC, National Resource Center)

(<http://www.cdc.gov/ncbddd/adhd/index.html>)

(<http://www.help4adhd.org/>)

- Tourette Syndrome(<http://www.cdc.gov/ncbddd/tourette/default.htm>)

- Youth

(<http://www.cdc.gov/HealthyYouth/mentalhealth/publications.htm>)

- **Nutrition & Obesity**

- <http://www.cdc.gov/obesity/resources.html>

- <http://www.cdc.gov/healthyweight/>

- CDC (2009). Recommended Community Strategies and Measurements to Prevent Obesity in the United States. MMWR, 58(RR07);1-26.

- **Oral Health**

- [http://www.cdc.gov/OralHealth/topics/dental\\_sealant\\_programs.htm](http://www.cdc.gov/OralHealth/topics/dental_sealant_programs.htm) (school based sealant program & resources)

- **Parenting**

- [www.cdc.gov/parents](http://www.cdc.gov/parents)
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 36, 567–589.

- **Refugee/Immigrant Health**

- <http://www.cdc.gov/ncidod/dq/refugee/faq/faq.htm>

- **School Health**

- <http://www.cdc.gov/HealthyYouth/>

- **STD**

- <http://www.cdc.gov/std/>
- <http://www.cdcpin.org/parentsmatter/program.asp> (Parents Matter! Program for preteens)

- **Violence Prevention**

- <http://www.cdc.gov/violenceprevention/index.html>

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