

Small Steps to Improve Children's Environmental Health in your Early Childhood Program

Common practices to keep your kids safer

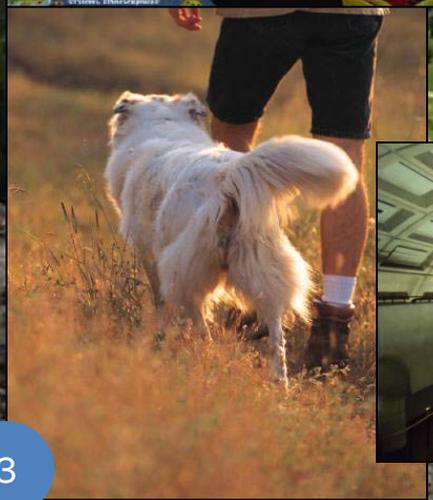
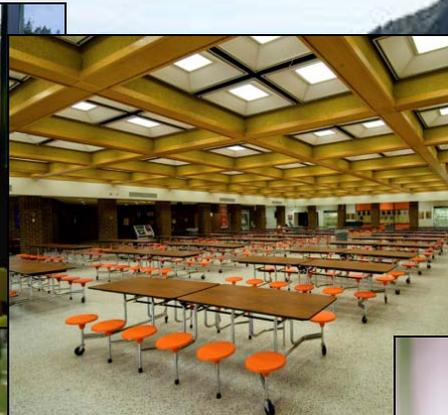
Kathy Seikel, Margo Young and Jacque Sell
September 26, 2012



Learning Objectives

- Discover why children are more vulnerable to environmental exposures
- Identify environmental hazards in child care settings
- Learn how to reduce these hazards and achieve recognition for running an Eco-Healthy child care
- Learn how other child care centers have been “greened” and where to find resources for more information

This is what environment looks like



Children Are Not Little Adults



Body Differences

- Drink, eat, and breathe more than adults, as based on body weight
- Children are rapidly growing and developing
- Less developed natural defenses
- More skin per pound and less protective skin
- Chemicals in the womb and in breast milk

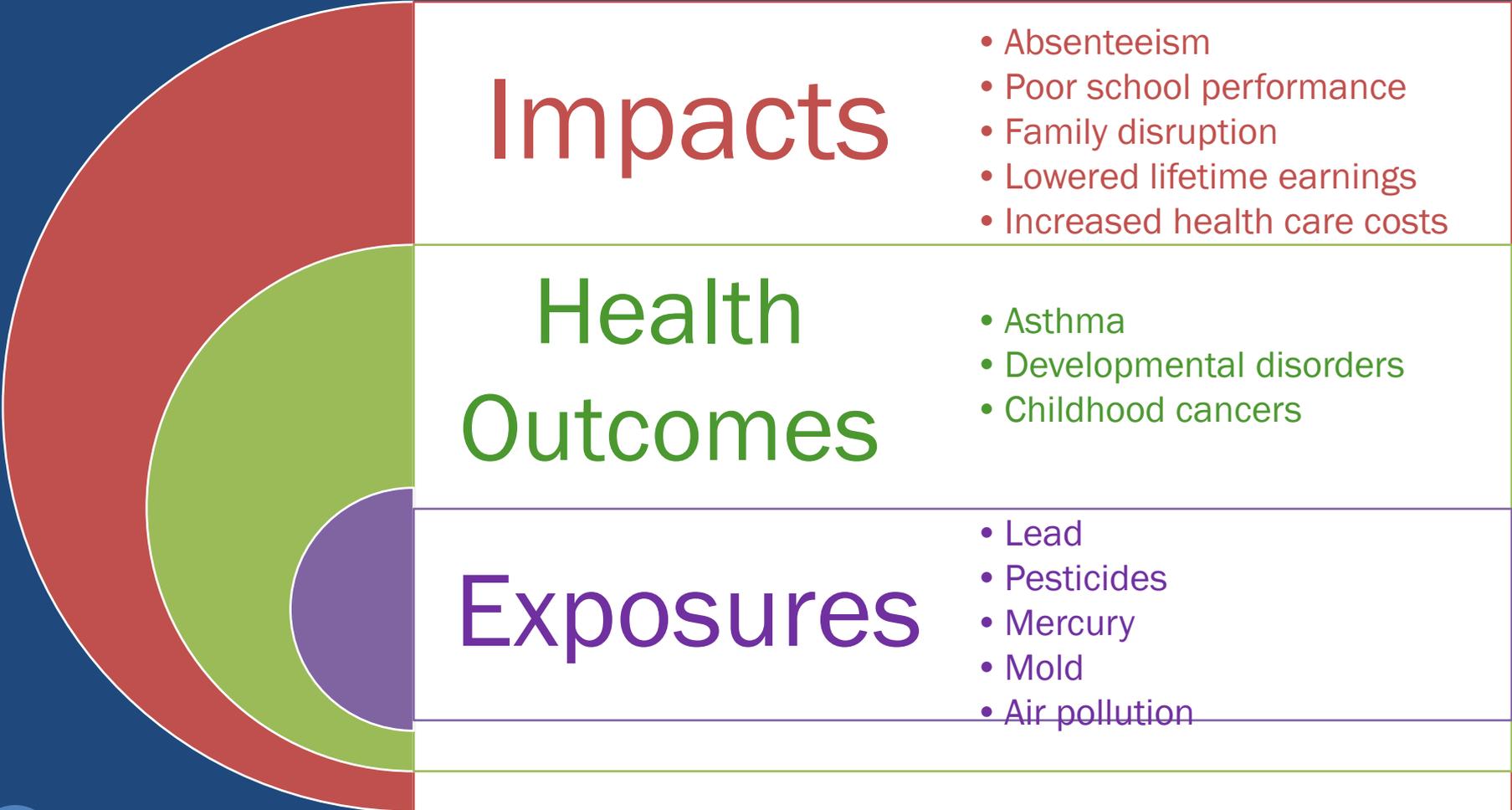


Behavioral Differences

- Natural explorers
 - Spend more time close or on the ground and floors
 - Spend more time outdoors than adults
- Mouthing behaviors
 - Place dirty fingers and objects in their mouth
 - Ingest dirt and dust, which may be contaminated



Environments Shape Outcomes



Impacts

- Absenteeism
- Poor school performance
- Family disruption
- Lowered lifetime earnings
- Increased health care costs

Health Outcomes

- Asthma
- Developmental disorders
- Childhood cancers

Exposures

- Lead
- Pesticides
- Mercury
- Mold
- Air pollution

Toxic Chemicals

A child born in America today will grow up exposed to more chemicals than a child from any other generation in our history.

A 2005 study found 287 different chemicals in the cord blood of 10 newborn babies – chemicals from pesticides, fast food packaging, coal and gasoline emissions, and trash incineration.

80,000 on the TSCA inventory

Lack of data and testing for new and existing chemicals

Restrictions on just 5 chemicals

Health Disparities

All children are susceptible to negative outcomes as a result of environmental exposures, but they disproportionately affect minorities and children living below the poverty level



Asthma

Brain Disorders

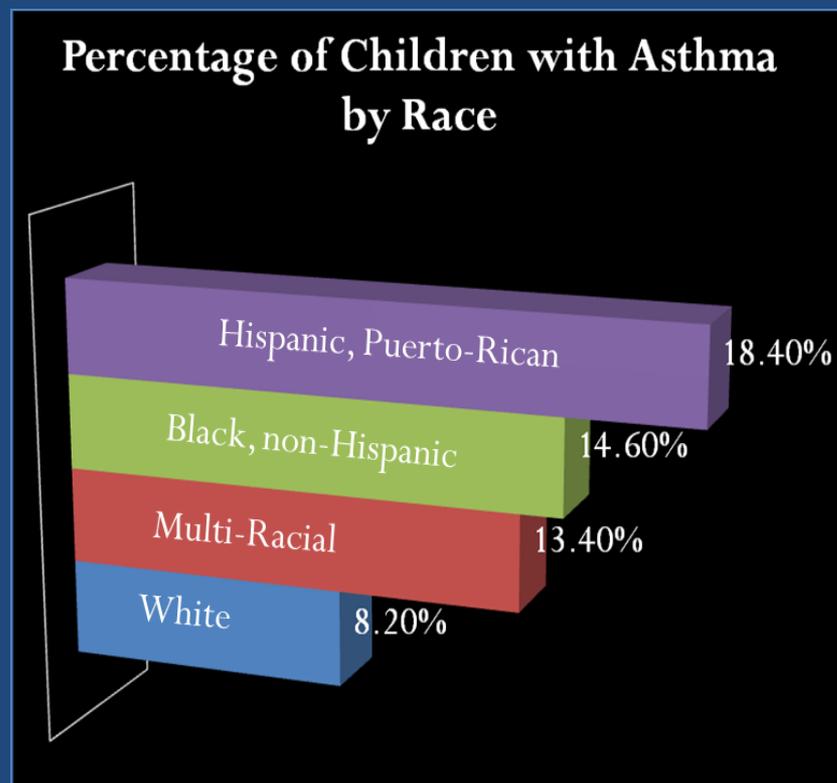
Obesity

Cancer



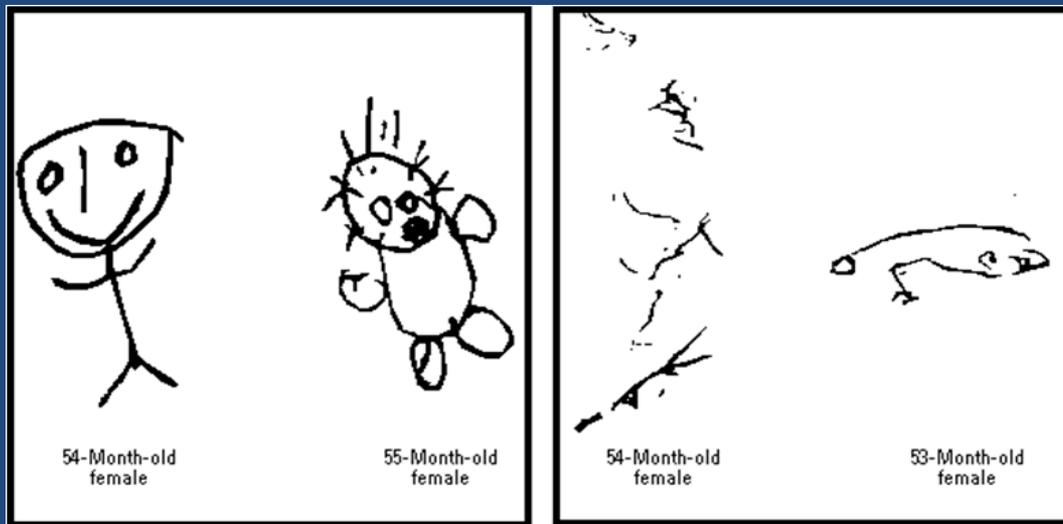
Asthma: Outcomes and Disparities

- 7 million kids suffer from asthma
- 2 million emergency room visits annually
- 13 million missed school days annually
- Black children are two times as likely to be hospitalized, four times as likely to die from asthma as white children

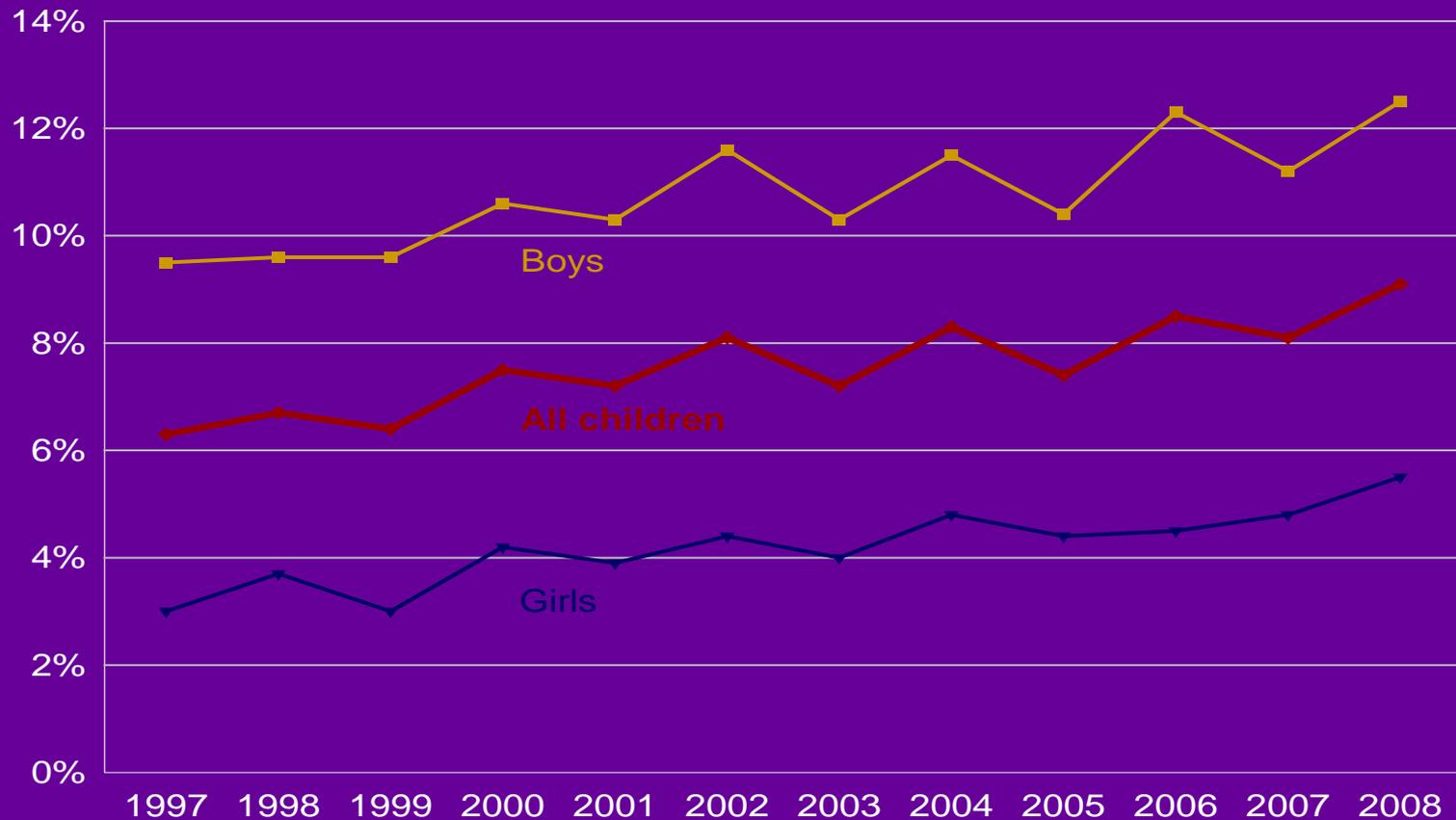


Brain Disorders: Outcomes and Disparities

- Exposure to certain chemicals can lead to ADHD, lowered IQ, autism spectrum disorders, behavioral disorders and/or developmental delays
- 12 million U.S. children, or 17%, have learning or behavioral disabilities
- 9% of school-aged kids – and 13% of boys - with ADHD, not even medically recognized in 1968
- ADHD is more common in children below the poverty level



Percentage of children ages 5 to 17 years reported to have attention-deficit/hyperactivity disorder, by gender



SOURCE: U.S. EPA. America's Children and the Environment.
www.epa.gov/envirohealth/children

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

Obesity:

Outcomes and Disparities

- Obesity in children has tripled in the last thirty years and today 1/2 of American children are either overweight or obese
- Obesity in children
 - 21.2% of Hispanic children
 - 24.3% of Black non-Hispanic children
 - 14% of White non-Hispanic children
- Research shows that some chemicals can lead to obesity

“Because of the increasing rates of obesity, unhealthy eating habits and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.”

Former Surgeon General, Richard Carmona



Cancer: Outcomes and Disparities

- Cancers: second cause of death among children (ages 1 -14 years of age)
- ~12,500 children and adolescents diagnosed with cancer each year
- Cancers may not appear until many years years after the exposure(s) to cancer-causing chemicals have taken place.



Child Care in the United States

- Nearly 11 million children in child care
- People spend about 90% of their time indoors
- Indoor air pollution levels can be 2-5 times greater than outdoor
- No universal policies on environmental safety for child care facilities



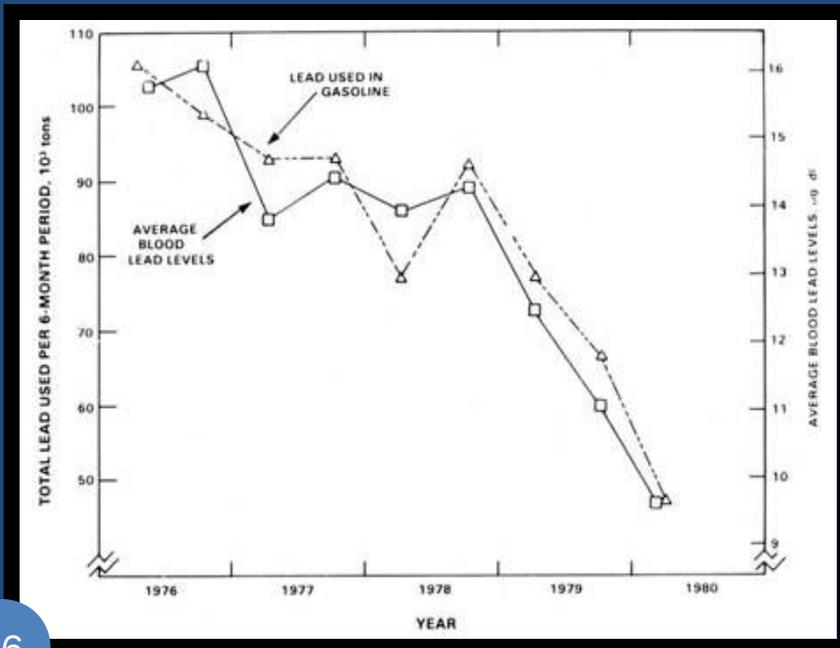
The Good News— Programs to Reduce Exposure Work!

Regulations can make a difference

- 1973 - Phase-out of lead in gasoline began
- 1978- lead in house paint banned
- 2008 – Lead-safe home repairs mandated

You can make a difference

- Consider switching to organic foods
- Use natural cleaning products
- Keep a smoke-free home
- Avoid serving seafood high in mercury



You can make a difference!

- With so many children spending so much time in child care centers, you can impact the children you care for
- Good environmental health and high quality child care helps children reach their full potential



Resources: epa.gov/childcare



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Healthy Child Care



Find information on how to identify potentially harmful environmental contaminants in child care settings and steps you can take to reduce or eliminate those hazards.

For Child Care Providers

- [Training and Curriculum Resources](#)
- [Environmental Health Issues in Child Care Settings](#)

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- [Key EPA Contacts](#)

Contact the Healthy Child Care Web editor to ask a question, provide feedback, suggest additional links, or report a problem.

Quiz Yourself!

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

Question 1

Lead based paint was used in how many homes before it was banned in 1978?

- A. 2 million
- B. 10 million
- C. 16 million
- D. 38 million

Related Topics

- [Children's Health Protection](#)
- [America's Children and the Environment](#)
- [Environmental Education](#)
- [Healthy School Environments](#)

Additional Child Care Related Information