Webinars
Series of scientific webinars that provide a forum for discourse on scientific issues.
Live and On-Demand
Case Conferences
Journal Clubs
Grand Rounds
CE Available

Online Courses
Evidence-based online courses on a variety of children's environmental health topics.
Interactive and Self-Paced
CE Available

Resource Catalog
Fact sheets, journal publications, reports, and other resources for parents, community members, patients and healthcare professionals
Topics included: Air Quality, Pesticides, Natural Disasters, BPA, Mold, Lead, Mercury
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Integrating Environmental Health into Existing Early Intervention Public Health Services

Abby Mutic MSN, CNM
Region 4 - Southeast PEHSU
1. Understand the importance of early environmental health intervention.

2. Identify types of existing early intervention (EI) services at federal and state level.

3. Describe potential impact of synergistic partnerships among existing public health services to amplify the reach of regional PEHSUs while enhancing existing EI services.
Presentation Overview

- Define early intervention (EI) services
- Rationale for collaboration with EI agencies
- Current EI structure
  - Federal
  - State
  - Local
- Early environmental health (EH) intervention
- Examples of successful integration of EH into EI programs
- Synergy between EI and children’s EH programming
Key Concepts

- Early Intervention
- Environmental Health
Why Intervene Early?

90% of a child’s brain development happens before age 5

Source: Harvard Center for the Developing Child
Factors Affecting Brain Development

- Nutrition
- Infection
- Adverse child experiences (ACE)
- Poverty
- Lack of protective factors
- Environmental exposures

Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan
The absence of fathers in the home is associated with a fourfold risk of poverty.
- 42% of single female-headed families are poor
- 12% for 2-parent families

Children of single mothers are at greater risk for:
- infant mortality
- child maltreatment
- failure to graduate from high school
- incarceration
Investing Early

Early Childhood Development is a Smart Investment

The earlier the investment, the greater the return

Source: James Heckman, Nobel Laureate in Economics
Focus on Prevention

- Only 1% of research dollars for childhood cancer is focused on prevention;

- 4% of research dollars are currently dedicated to identifying environmental triggers of autism when many agree that the primary rise in rates of autism is likely due to the environment.
Parents, physicians and advocates can support prevention.
Partnerships at the Center of Public Health

Advancing the Field of Environmental Health by

Improving population health through healthy living
Promoting health equity and environmental justice across places
Providing a voice for environmental health practitioners

APHA’s Environmental Health Portfolio:

<table>
<thead>
<tr>
<th>Healthy Community Design</th>
<th>Natural Environment</th>
<th>Partnerships &amp; Systems</th>
</tr>
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<tbody>
<tr>
<td>5. Food Systems</td>
<td>5. Air Quality</td>
<td>5. Improving EH Systems</td>
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Governmental EH programs experienced cuts and restructuring due to insufficient human and financial resources.

Questions:

- How does community interacts with, and accesses services from these programs?
- What are the requisites for an ideal system?
- What is the role of non-governmental partners?
- How can various sectors to work together in more effective ways?
Lectures to Public Health Professionals

EI Services
Hospitals and Clinics

EI Services
HHS Programs

ACF
- Children’s Bureau
- Office of Child Care
- Early Child Development
- Office of Head Start

HRSA
- Maternal Child Health Bureau
- Title V
- Home Visiting
- Healthy Start
- Collaborative Improvement and Innovation Networks
Federal Support for EI Programs

Early Head Start Program Options

- Home-Based, 36%
- Center-Based 5 days/week, >6 hrs/day, 51%
- Other Center-Based Options, 4%
- Family Child Care, 3%
- Pregnant Women, 4%
- Combination, 1%
- Locally Designed, 1%
- Other, 2%

Head Start Preschool Program Options

- Center-Based 5 days/week, >6 hrs/day, 50%
- Center-Based 4 days/week, >6 hrs/day, 5%
- Center-Based 4 days/week, <=6 hrs/day, 21%
- Other, 3%
- Home-Based, 1.8%
- Combination, 0.5%
- Family Child Care, 0.2%
- Locally Designed, 0.5%
Maternal, Infant, and Early Childhood Home Visiting (MIECHV)

- Evidence-based approach
- Provide a myriad of content related to parenting and health
- Designed to expand early intervention services to at-risk families
- Use public resources efficiently and meet independent family needs effectively
- 50 states+ currently offering

In FY 2017, MIECHV served 156,000 parents and children and provided more than 942,000 home visits!
A knock on the front door can bring parents the support they need to nurture their young child’s healthy development. Home visiting reaches families wherever they live by delivering parent support and child development services directly to the home environment.

Learn more: www.zerotothree.org/homevisiting

HEPA air filters
Humidity-mold
Low VOC paint
Opening windows to circulate fresh air
Crumb rubber, heat
Safe toy options
Safe cleaning products
Removing dust
Removes volatile toxicants
Formal training sessions with EI coordinators, and family support workers
- Focus on general environmental health, diseases and illnesses associated with toxicants
- Common sources of exposure in the home
- Media tools to reduce home exposures

15 Sheltering Arms Centers representing >3500 children living in 6 counties in Georgia.

58 PAT educators, family support workers, and DPH workers serving over 2,000 families within 25 counties in Georgia.
EH Training: Didactic, Hands On, Print Materials

Didactic instruction

Example station: informational handouts

Example station: cleaning product demonstration
EH Training: Technology

EWG Good Guide

Fish4Health

Detox Me
How Do I Start?

- Determine your population
- Consider your capacity and man power
- Contact supervisors
  - Ask for contacts and introductions;
  - Ask for opportunities to simultaneously promote health and overlay CEH;
  - What are their specific program needs?
Train and Support

- Take CEH resources, make learning interactive
- Get their contacts! Follow up by email, snail mail
- Offer additional training by phone or webinar refreshers
- Visit yearly to check in, reevaluate what works/does not work
- Evaluate the process and reach
Create a Mobile EH Resource Tote

- Infographics
- Videos
- Interactive apps
- Pamphlets
- Rack cards

Make sure the materials are addressing your audience but general enough for all other groups (i.e., translated materials, people of color, gender neutral)
Research federal and individual state MCH programs;
Identify any EH gaps in their programs;
Develop relationships and engage your team to take part in outreach efforts and home visiting services;
Plan trainings and compile a resource guide of existing materials (i.e. asthma self-management programs, environmental supports) for use by leaders and outreach workers;
Create multi lingual and culturally appropriate educational and outreach materials
Add your region-specific materials
Follow up, support their education and resource needs;
Track and evaluate the progress;

Early EH Intervention: Summary
http://littlethingsmatter.ca/2018/02/12/cause-or-cure/
https://www.apha.org/-
/media/files/pdf/topics/environment/ephs_summary.ashx ?la=en&hash=D5E14AA7D592F1257FD633B3E0BDBD BDAE3B4EBF
https://www.apha.org/-
/media/files/pdf/topics/environment/apha_eh.ashx?la=en &hash=10F3BB905AECAC973B87CC6C762C4537305 035EB
https://heckmanequation.org/assets/2017/01/F_Howard_Article_FourBenefitsInvestingECDvelopment_022615.pdf
• Slide 6: Free Google photos: https://www.google.com/search?as_st=y&hl=en&tbs=sur%3Af&tbm=isch&sa=1&ei=OXcFW7bKCOuGjwTXs6DgCA&q=children+health&oq=children+health&gs_l=img.3..0i10.7314.10785.0.11219.17.11.2.4.5.0.108.792.10j1.11.0....0...1c.1.64.img..0.17.916...35i39k1j0i67k1j0i10k1.0.y-8r0CufVv4#imgrc=wvq8Sw6reiULPM:&spf=1527084868986
• Slide 8: CDC
• Slide 21: Region 4, Break the Cycle: https://www.breakthecycleprogram.org/
• Slide 33: Free Google photos: https://www.google.com/search?as_st=y&tbm=isch&hl=en&as_q=tote&as_epq=&as_oq=&as_eq=&cr=&as_sitesearch=&safe=images&tbs=sur:f#imgrc=GhzLj5D5vEr8IM&spf=1527093174602

Visuals Credentials
Thank you!

Questions?