Communicating With Patients on Climate Change With an Equity Lens

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The What

Climate Change as a Social Determinant of Health

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The Why - Understanding Inequity & Climate

Temperature disparities in historically redlined areas


Where Does Climate Fit?

Screening protocols include structural determinants of health and climate risks
Ex: Food security, water source, housing security and safety, energy security, depression and anxiety

Health promotion includes health and planetary benefits
Ex: Diet, active transportation and outdoor play, civic engagement

Care for all children considers and anticipates climate risks
Ex: Children with complex medical conditions and disasters, those participating in sports and extreme heat, children with asthma and allergies and poor air quality and pollen

Anticipatory guidance is informed by climate change
Ex: Never leaving children unattended in vehicles, heat and sun safety, street safety, accessing public health alerts, prevention of vector-borne diseases and emerging harms

Community resource network and referral plans are in place and center patient concerns
Pediatricians can support climate and public health preparedness and adaptation that centers the needs of children, equity and child health.

Fig. Aspects of climate-informed primary care pediatrics.

Source: Philipsborn et al. 2021
A pediatrician's guide to climate-change informed care
Where Does Climate Fit?

Preventative Screening

Medical Hx and Medication Review

Illness related visits – highlight a climate health link

Well Care - Anticipatory Guidance
The How - Centering Equity

- Be prepared – know your community
- Educational resources that prioritize health literacy, language and format accessibility
- Considering the accessibility of adaptive interventions
- Building community partnerships with mutual benefit
- Incorporating patient and family input
- Advocacy for upstream change
Recognizing Barriers

<table>
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<th>Time</th>
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<tr>
<td>Imposter syndrome</td>
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<td>Feeling partisan</td>
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<td>Catch 22 situations</td>
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<tr>
<td>Limited resources</td>
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Communication Strategies

- Be open and receptive – “read the room”
- Acknowledge/validate
- Empower, avoid victimization
- Personal, positive, & local
Integrating Climate – Resources for Patients & Professionals

Pediatrics Maintenance of Certification Educational Modules

CLIMATERX – Educational Handouts
Anticipatory Guidance and Context-Specific Resources to Protect Children in a Changing Climate

- Heat Related Illness
- Sea Level Rise & Flooding
- Nutrition
- Extreme Weather
- Infectious Disease
- Asthma & Allergies

Health Effects of Climate Change on Children
Self-paced

Mental Health

Did you know? Climate disasters and forced migration have been linked to PTSD, depression, and anxiety. As children learn more about climate change, we are seeing a rise in “eco-anxiety” or “eco-grief”, as they worry about a future with the threats of a changing climate. Feelings may fear, anger, sadness, etc. Extreme weather due to climate change limits opportunities for physical activity and social events, which can make isolation worse.

Action Plan
- Engage in conversations
  - Discuss with friends, family, and children about climate and how it is impacting our lives
  - Promote awareness about the effects of climate in your community
- Watch for warning signs: Look for changes in children’s behavior, attitude, motivation, appetite, sleep patterns, and school performance
- Take action:
  - Develop a safety plan
  - Remove access to harmful objects such as firearms and ammunition
  - Seek professional help with your medical provider to discuss therapy and/or other options

Community Resources
- Complete an emergency plan with your children to help cope after a climate disaster
- Call the National Suicide Prevention Lifeline at 988 if you or a loved one are experiencing emotional distress, thoughts of self-harm, or a suicide crisis.

Boston Children’s Hospital Pediatric Environmental Health

Dedicated to the Health of All Children
Environmental/Climate Screening – A Pilot

Left Panel: 3,000 patients with asthma, overlaid on census tracts colored by percentage of population underneath the poverty line.

Right panel. Map of the same area of Boston overlaid with census block groups colored by the percentage of Black population.
HEALTHY HOMES “HHOMES”
SCREENER TOPICS
H: Housing type, age/condition and ownership status
H: H20 (water contamination, mold)
O: Oxygen (indoor/outdoor air quality, smoke exposure)
M: Mites (pests/rodents)
E: Exposures (chemical products, hazardous sites)
S: Stressors (SDOH, climate change)

Patient receives automated survey by email
Survey submitted
Provider addresses concerns at visit and provides resources as indicated leveraging resource hub
Provider documents hazards and actions in note using autotext

Pre-Visit Reminders
- Automated email at 3 days, 24 hours prior
- Verbal by phone at visit confirmation call and day of
- QR code in waiting room

RA reviews responses and places sticky note in EMR with pertinent positives
Lessons & Limitations

TESTIMONIAL: “I am finding it a time saver in the appointments because I can hone in on the responses instead of starting a fishing process of trying to identify the needs. I appreciate the upfront work of getting questionnaires in the chart and hope we can continue this screening program long term.”

<table>
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<tr>
<th>Physical Resources</th>
<th>Over $2K worth of hazard mitigation supplies</th>
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<td>Lessons &amp; Limitations</td>
<td>Provider Resource Hub</td>
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<tr>
<td>Available in English &amp; Spanish</td>
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<td>Testimonial</td>
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Handouts available

Websites available

Consider advocacy letter, social work consult, greater Boston Legal Services (GBLS) referral

Community Partner Options

- Living in Boston? Breathe Easy
- not living in Boston? Local Board of Health Community Asthma Initiative

Physical Resource Options

- Cleaning kit (mask, gloves, disinfectants)
- HEPA filter
- Vacuum
- Dustmite bed/pillow covers
- Copper-mesh wire food storage bins
- Too hot? Fans, AC, window blocking shades, dehumidifier, insulation kits

Breathe Easy

- Local Board of Health Community Asthma

Available in English & Spanish

Boston Children’s Hospital
Pediatric Environmental Health

Asthma and Allergy Foundation of America®
NEW ENGLAND CHAPTER

Region 1: New England
PEHSCU
Preliminary results

Temperature Insecurity Screening (preliminary)
- 23% of all respondents
- 30% of those living in subsidized/public housing
- 60% also reported utility insecurity*
- 45% (18/40) also reported food insecurity*

*p < 0.05

Disproportionate Environmental Hazard Burden Experienced by Residents of Subsidized/Public Housing

Boston Children’s Hospital
Pediatric Environmental Health

Asthma and Allergy Foundation of America®
NEW ENGLAND CHAPTER
Transition to Breakouts