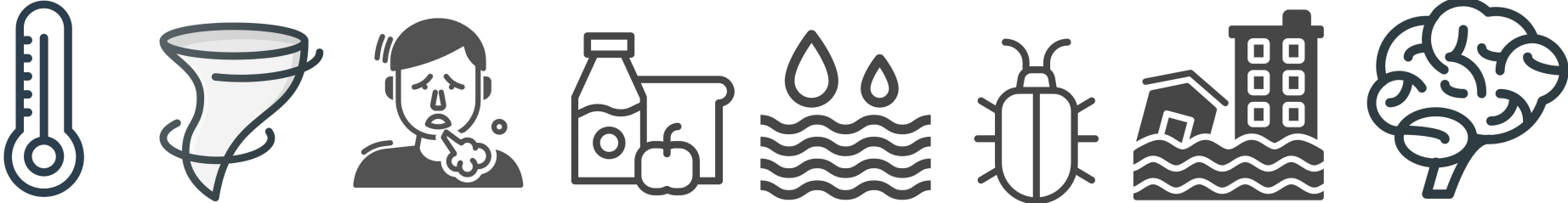


ClimateRx

Anticipatory Guidance and Context-Specific Resources to Protect Children in a Changing Climate



Boston Children's Hospital
Pediatric Environmental Health

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Region 1: New England

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Pediatric Environmental Health
Specialty Unit

Heat Related Illness



Did you know?

Climate change increases Earth's temperature. Cities are warmer compared to neighboring towns due to steel buildings, concrete and paved roadways absorbing heat. Hot temperatures impact children's physical and mental health and their ability to learn in school. Signs of heat-related health effects include feeling dizzy, dehydration, headaches, muscle cramps, difficulty focusing, increased irritability and more.

Action Plan

- **Dress for Success:** Wear protective clothes (light-colored clothing, hats, sunglasses, SPF-lined)
- **Protect your skin:** Wear sunscreen SPF ≥ 30 , (re-apply at least every 2 hrs and after swimming/sweating)
- **Limit Exposure:** Avoid outdoor activity during peak sun (10 am-4 pm) and seek out shaded areas
- **Be prepared:** Drink plenty of fluids to stay hydrated and take breaks often
- **Be aware** of symptoms of heat-related illness (headaches, muscle cramps, fevers, excessive sweating, dizziness, or confusion) and **seek medical attention**
- **Take care of each other:**
 - Check in on neighbors, elderly, etc.
 - Engage in your local community to create and spread awareness of cooling centers

Community Resources

Assess your risk by learning about the [heat index](#) and symptoms of heat related illness

Search for and visit [cooling centers](#) in your local community

Learn [more](#) about ways to prepare and be safe during extreme heat (12 languages available)



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Extreme Weather



Did you know?

Climate change increases the intensity and frequency of tropical storms, major hurricanes, and heat waves. These extreme weather events are a health risk for child safety, physical and emotional health.

Action Plan

- **Be prepared:** develop an emergency plan for you, your family, and your neighborhood
 - Sign up for emergency alerts/warnings
 - Build an emergency kit
 - Create an evacuation plan with your family
 - Know how to seek shelter (FEMA App)
 - Develop a family communication plan
- **Strength in numbers:** Reach out and look after neighbors (especially the elderly, those with young children, or those with chronic health conditions who may be more at risk) if your community experiences an extreme weather event. Work as a community to develop and share evacuation plans.
- **Take action:** Seek help from your medical provider for health concerns

Community Resources

Create an [Emergency Plan](#) with your child

Build an [Emergency Kit](#) for your family

Complete an [activity book](#) with your child(ren) to help cope after a climate disaster

Sign up for [emergency alerts](#) and **download apps** to stay informed if you have a mobile device.



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Asthma & Allergies



Did you know?

Climate change creates longer, stronger pollen seasons, which can trigger asthma and make it harder to breathe. Extreme temperatures caused by climate change can also lead to asthma flares.

Action Plan

- **Set up for success:**
 - Have your prescribed Asthma Action Plan readily available and review it with your medical provider
 - Avoid smoke and vape exposures
 - Discuss anti-allergy medications with your medical provider
- **Be aware:**
 - Check your local allergy index to assess daily risk
 - Avoid major air pollution sources like the highway or idling vehicles by limited prolonged time outdoors or exercising in these areas if possible.
- **Be prepared:**
 - Know how to quickly access your inhalers
 - Store medications at room temperature *Note: inhalers can be less effective if kept in extreme heat
- **Act quickly:** Learn the signs of worsening asthma (difficulty breathing, chest pain, persistent cough, shortness of breath, etc) and seek help if you develop these symptoms!

Community Resources



Check the [Air Quality Index](#) for your community. This resource monitors the five major pollutants present.

Check the [Allergy Forecast](#) for your community. This resource tracks the daily and projected pollen level.

Plan ahead by developing and reviewing an [asthma action plan](#) with your medical provider.



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Nutrition



Did you know?

Climate change impacts the foods that are available, how much it costs, and how nutritious it is. As extreme weather impacts farming, changes in our ability to access healthy foods impacts how children grow and develop.

Action Plan

- **Eat thoughtfully**
 - Meat and dairy are big contributors to greenhouse gas emissions, by incorporating plant-based meals into your diet you can improve both your health and the planet!
 - Support local farms and businesses
 - Sustainable diets are both good for the Earth, your community, and your health
- **Limit waste:** Excess food production contributes to greenhouse gas emissions. Try meal prepping, donating to local pantries, and composting to reduce your impact
- **Screen for nutritional deficiencies:** Discuss your child's diet, growth, and eating habits with your pediatrician.

Community Resources



Find your local food bank with [Feeding America](#)

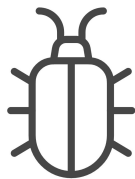
Taste something new: try different [climate friendly recipes](#), New York Times [climate recipes](#) to incorporate more plant based food into your diet

Explore these tips on [eco-friendly cooking](#)

Learn how to prepare safe water during emergencies, click [here](#)

Learn about your [tap water](#) with the Tap Water Database, [here](#)

Infectious Disease



Did you know?

You may be at risk for diseases that are new to where you live. Climate change has been linked to the increasing geographic spread of Lyme disease, worsening mosquito-borne and waterborne diseases such as malaria, West Nile virus and more.

Action Plan

- **Avoid Exposure** in areas with low-level shrubbery and edges of woods
- **Dress appropriately:** Cover skin with long pants, high socks and closed-toed shoes; light-colored clothing makes ticks easier to find. Use insect repellent with DEET/permethrin for exposed areas
- **Conduct Tick-Checks:** Search clothing and body carefully including behind the knees, between fingers and toes, underarms and groin, belly button, in/behind ears, neck, hairline, and the top of the head
- **Wash hands** often to prevent spread of contagious disease
- **Be aware** of pesticide spraying and chemical exposures in your community during outbreaks
- **Seek medical attention** if you develop symptoms such as fevers, rashes, joint pains, abdominal pain, diarrhea, etc.

Community Resources

Learn about [water hygiene](#) and how to stay safe when your water may not be safe to drink.



Explore this [CDC website](#) with details on identifying ticks/diseases

Use the [CDC Tick Bite Bot](#) to learn how to remove ticks correctly and determine if you need to seek medical care.

Black-Legged Tick



Deer Tick



Lone Star Tick



Image: MA
Department
of Health

Sea Level Rise & Flooding



Action Plan

- **Be Aware:** Check if where you live is at risk for flooding. Sign-up for emergency alerts in your area
- **Be Prepared:** Create an evacuation plan and teach your children how to contact you in case of emergency
- **Avoid Standing Water**, if possible. Stormwater can be a source of infectious diseases, contain chemical hazards, and cause injury. Do not swim after storms
- **Know the Risks:** After flooding, excess moisture and standing water contribute to the growth of mold in homes. *Exposure to mold can be a health risk for children with underlying health conditions such as asthma. Seek help from your child's medical provider for health related concerns

Did you know?

The sea level is rising more quickly due to increasing temperatures and precipitation. Sea level rise can cause flooding and pollute the water that children drink from and play in. Flooding in buildings can also lead to the growth of mold, which is harmful for our health.

Community Resources

Use this [Flood Zone Mapping Tool](#) to see if your home is located within a Federal Emergency Management Agency (FEMA) designated flood zone or flood plan



Create an [Emergency Plan](#) with your child
Build an [Emergency Kit](#) for your family



Sign up for [emergency alerts](#) and **download apps** to stay informed if you have a mobile device.

Learn how to safely [Clean Up](#) moisture after floods to prevent mold

Mental Health



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

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/outdoor activities and social events, which can make isolation worse.

Community Resources



Complete an [activity book](#) with your child(ren) 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 suicidal crisis.



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Climate Advocacy - What can you do?



Action Plan

- **Vote & Advocate:** Engage with community organizations in the fight against climate change.
- **Reduce, reuse, recycle (in that order!)**
 - Avoid single-use products and consider donating products that you have outgrown or no longer use
 - Turn off appliances and lights when not in use
 - Reduce food waste and limit meat consumption by incorporating more plant-based foods in your diet and composting food scraps
- **Be mindful of your transportation:** Walking and biking reduce your carbon footprint and are good for your health, win-win! Use public transportation when you can
 - Decrease your personal energy use and consider using renewable energy sources to power your home/vehicles if possible

Did you know?

Climate change can be overwhelming, but you can be part of the solution. We can adapt, prepare, and make progress in limiting the effects of climate change through our individual actions and community engagement.

Community Resources



Explore the [Climate Ready Map](#) to see how climate change impacts your neighborhood

Start a climate group using the [Toolkit for Youth Leaders](#) to encourage climate action

Plan your trip with [public transport](#)

Connect with [climate creators](#) on social media platforms

Register to vote <https://www.usa.gov/register-to-vote>



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