ClimateRx - New Hampshire

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

This ClimateRx was supported by the American Academy of Pediatrics (AAP) and funded (in part) by a cooperative agreement with the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (CDC/ATSDR). The U.S. Environmental Protection Agency (EPA) supports the PEHSUs by providing partial funding to CDC/ATSDR through an Inter-Agency Agreement. The development of this resource was also funded (in part) by the NIH/NIEHS K23 ES031663 Award. The findings and conclusions presented have not been formally disseminated by CDC/ATSDR or EPA and should not be construed to represent any agency determination or policy. Use of trade names that may be mentioned is for identification only and does not imply endorsement by the CDC/ATSDR or EPA.

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Extreme Temperatures and Heat Stress

**Action Plan - Rest, Shade, Rehydrate**

- **Dress in Light Colors/Fabrics:** 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

**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. Signs of heat-related health effects include feeling dizzy, dehydration, headaches, muscle cramps, difficulty focusing, increased irritability and more. These health effects can happen during or in the days following a heat wave.

**Community Resources**

- **Learn** more about [Heat-Related Illness](#) in NH
- **Search** for a cooling center via [NH 2-1-1](#)
- **Go** to a local air conditioned [cooling center](#) or facility for enjoyment ([library](#), [senior activity center](#), [movie theater](#), [shopping center](#), [restaurant](#), [museum](#))
- **Check** out the [Water Features](#) in Manchester, NH

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**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

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**Community Resources**

- Create an [Emergency Plan](#) with your child
- Build an [Emergency Kit](#) for your family
- Listen to [NOAA Weather Radio](#) or local radio stations 95.7FM and 1370AM for updates
- Watch local TV channel [WMUR Channel 9](#) for weather updates (Manchester, NH)
- Sign up for [Emergency Alerts](#) and download apps on a mobile device to stay informed (such as FEMA)
- Prepare for, monitor and report local power outages
- Inform on [Food Safety](#) after an extreme weather event

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**Did you know?** Climate change increases the intensity and frequency of tropical storms, major hurricanes, and heat waves. New Hampshire ranks #8 in the country for flooding risk and #21 for precipitation (storm) risks. These extreme weather events are a health risk for child safety, physical and emotional health.
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
  - Stay up to date with flu and COVID vaccines

- **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

- **Learn how** [Climate Change Affects Asthma](#)
- **Explore** [NH state-specific resources](#) for asthma (including education, medication assistance, and resources for kids/teens)
- **Track** daily [Air Quality Conditions](#)
- **Check the** [Allergy Forecast](#)
- **Plan ahead** by developing and reviewing an [asthma action plan](#) with your medical provider.

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**Did you know?** NH has high rates of asthma in the United States; affecting 13.2% of adults and 7.2% of children. Climate change creates longer, stronger pollen seasons, which can trigger asthma and make it harder to breathe. Extreme temperatures caused by climate change or mold/environmental contamination after extreme weather events can also lead to asthma flares.

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**Boston Children's Hospital**

Pediatric Environmental Health

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Community Resources

- Learn about the benefits of a Plant-Based Diet
- Join the NH Snap Program for access food assistance if eligible
- Find a local NH Food Bank through the Food Assistance Program and/or attend a Mobile Food Pantry
- Apply for the Women, Infants, and Children (WIC) Nutritional Program
- Apply for the Southern NH Emergency Food Assistance Program (TEFAP)
- Visit a local Farmer’s Market of Community Garden
- Utilize the Families in Transition food pantry and dining services
- Contact child’s local school administrator or nurse to learn about free meals at school

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.

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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

- **Use the CDC Tick Bite Bot** to learn how to remove ticks correctly and determine if you need to seek medical care
- **Watch** this video to learn how to **Properly Remove a Tick**
- **Use the Tick Encounter** to learn about active ticks in the New England area

**Did you know?** Climate change is making Lyme disease (and other diseases spread by vectors such as malaria and West Nile virus) worse by increasing its geographic spread. US rates have nearly doubled since 1991 and NH was among the top three states experiencing this increase (below ME and VT). With climate change, you may be also be at risk for diseases that are new to where you live.
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. If you must come in contact with floodwater, wear rubber boots, gloves, and goggles.
- **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. By 2050, the Northeast US will see a 50% increase in precipitation overall, and a threefold increase in severe storms. 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

- **Learn about the dangers of flood waters** and how to protect your family.
- **Sign up for** Emergency Alerts to stay informed.
- **Search your address** using Climatecheck to see different climate risks in your area, including flooding risk.
- **Learn how to clean up moisture** after flooding to prevent mold.
- **Check the Healthy Swimming Mapper** for current water quality conditions of local beaches, lakes, and ponds.
- **Learn about NH Tap Water Utilities** with water quality violations.

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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

Community Resources

● Join a local NH Support Group or try Individual Therapy for climate-related mental distress

● Find a local NH Community Behavioral Health Association Mental Health Center

● Call 211 for referral to mental health resources in NH

● Call the National Suicide Prevention Lifeline at 988 or Live Chat online if you or a loved one are experiencing emotional distress or a suicidal crisis
  ○ For deaf and hard hearing dial 711 then 1-800-273-8255

● Complete an Activity Book with your child(ren) to help cope after a climate disaster

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.

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Climate Advocacy - What can you do?

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.

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

Community Resources

- **Register** to [Vote](#)
- **Learn more** about how the [NH Department of Health and Human Services](#) is engaged on health and climate
- **Learn** about the steps of [composting](#) to reduce your carbon footprint
- **Use** [NH Public Transportation](#) when possible
- **Join** an [NH Environmental Support Group](#) to encourage climate action and protection
- **Connect** with [Climate Creators](#) on social media platforms