

ClimateRx

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



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The Southeast
Pediatric Environmental Health Specialty Unit

Heat Related Illness



Action Plan

- **Dress for success:** Wear protective clothes (light-colored clothing, hats, sunglasses, SPF-lined).
- **Protect your skin:** Wear sunscreen SPF > 30, (reapply at least every two hours and after swimming/sweating).
- **Limit exposure:** Avoid outdoor activity during peak sun (10 a.m. to 4 p.m.) 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 in school. Signs of heat-related health effects include feeling dizzy, dehydration, headaches, muscle cramps, difficulty focusing, increased irritability, and more. In South Carolina, which exists in a humid, subtropical climate, the heat index sits above 80°F (a level that can be unhealthy) for over 1000 hours on average each year.

Community Resources

Check the CDC [heat risk](#) for your area and learn about ways to protect you and your family. Assess your risk by learning about the [heat index](#) and [UV index](#) and symptoms of heat-related illness.

Dial 2-1-1 or check local news outlets for [cooling centers](#) (e.g., public libraries) in your local community.

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

Learn more about [extreme heat in South Carolina](#).



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Extreme Weather



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 (use the 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.

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. South Carolina experiences between 45 and 70 thunderstorm days each year, is consistently ranked in the top 10 states for average annual temperature and ranks fifth among the states for most hurricane impacts since 1851.

Community Resources

Create an [emergency plan](#) with your child.

Build an [emergency kit](#) for your family.

Create a [backpack emergency card](#) with essential information for your child.

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

Sign up for state-wide [emergency alerts](#) and register for [CodeRED emergency alerts](#) to receive messages by phone, text, and/or email. Download apps to stay informed if you have a mobile device.

Find open [emergency shelters](#) during extreme weather events.



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Asthma & Allergies



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.

• 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!

Did you know?

In SC, 9.4% of adults and 8.4% of children currently have asthma. 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.

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.



Learn more about how [climate change affects asthma](#).



Nutrition



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.

Did you know?

Climate change impacts the foods that are available, how much it costs, and how nutritious it is. This is worsened by the fact that over one million South Carolinians live in food deserts, which is an area where it's hard to find healthy food, like fruits and vegetables, because there are no grocery stores nearby. As extreme weather impacts farming, changes in our ability to access healthy foods impacts how children grow and develop.

Community Resources

Find your local food bank with [Feeding America](#) and [Feeding the Carolinas](#).

Learn about SC food and nutrition programs such as SNAP, TANF, Senior Farmers' Market Nutrition Program, and afterschool meals from the [SC Department of Social Services](#).

Engage with [community-based farmers markets](#) throughout SC.

Taste something new: Try different [climate-friendly recipes](#), including [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.

Learn about your tap water by visiting the [Tap Water Database](#).



Infectious Disease



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.

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 and worsening mosquito-borne and waterborne diseases such as malaria, West Nile virus, and more.

Community Resources

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

Learn about [mosquitoes in SC](#) and best practices for how to reduce mosquitos around your home and local community.

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.



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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 in South Carolina has already increased by about 7 inches since 1950. 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. Damaging floods in South Carolina can affect thousands of residents and threatens billions of dollars' worth of property.

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.

[“Know Your Zone”](#) for hurricane evacuations and storm surge risk in coastal communities.

Stay up-to-date about [beach safety](#) during and following rainfall events.

Follow [these steps](#) before, during, and after a flood to ensure both personal safety and minimize/address property damage safely.



Wildfires



Action Plan

• Before a fire approaches your home:

- Remove children, pets, and others who are not involved in preparations.
- Turn off natural gas and fill large containers (sinks, bathtubs) with water.
- Remove materials that can easily catch fire such as curtains, woodpiles, and lawn furniture.
- Leave lights on and doors unlocked for firefighter/volunteers before leaving.

• During a fire:

- In cars: Drive slowly with windows up to avoid breathing toxic air.
- If outside: Find areas with little fire fuel and cover yourself to protect from heat.
- At home: Stay away from outside walls, keep doors closed but unlocked, and stay calm.

• If there is a wildfire nearby:

- Check your air quality index to understand if there is pollution affecting your area.
- Avoid time outdoors when there is smoke outside. If this cannot be avoided, wear a well-fitting N95 mask outdoors that offers the best protection.
- Work to make your indoor air as clean as possible by shutting windows and using air filters.

Did you know?

Climate change increases the risk of wildfires by creating hotter and drier conditions that make forests more likely to catching fire and spread quickly. In South Carolina, the two most common causes of wildfires are careless debris burning and woods arson. Large wildfires, even a great distance away, can increase air pollution, which can affect our breathing, especially for those with asthma and other respiratory conditions.

Community Resources

Review [this full action plan](#) from the SC Emergency Management Division about what to do before, during, and after a fire.

Stay up-to-date on fire risk in your local communities using [this map](#) from the National Weather Service.

Learn more about wildfires, masking, and how to stay safe with resources from the [Western States PEHSU](#).

Introduce your child to [Smokey Bear](#) and engage them in safe fire behavior from an early age.

Do your part in preventing wildfires in your communities following [these steps](#).



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.
 - 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.

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 include fear, anger, sadness, etc. Extreme weather because of 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.

For a local option, **contact** the SC Department of Mental Health's Mobile Crisis Team, a statewide, toll-free, 24/7 line: **833-364-2274**.

Familiarize yourself with local South Carolina centers that can provide consistent mental health resources and help, such as the county mental health centers and clinics found [here](#).



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Climate Advocacy

What can you do?



Action Plan

- **Reduce, reuse, recycle** (in that order!):
 - Avoid buying single-use products.
 - Turn off appliances and lights when not in use.
 - Reduce food waste and limit meat consumption
 - Compost food scraps.
 - Consider donating children’s clothes that are outgrown.
- **Be mindful of your transportation:**
 - Walking and biking reduce your carbon footprint and are good for your health, win-win!
 - Use public transportation when possible.
- **Decrease your personal energy consumption** and consider using renewable energy sources to power your home/vehicles if possible.
- **Vote & advocate:**
 - Engage with community organizations in the fight against climate change.
 - Let your lawmakers know this is important to you.

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. In South Carolina, where our cultural and economic identity is tied to our physical environment, there are [important steps](#) we are taking to preserve our environment and plenty of ways to get involved in this progress.



Community Resources

Get involved with SC statewide and local environmental organizations like [Palmetto Pride](#) and [others on this list](#) and find other individuals focused on protecting our state from environmental health risks.



Download the “Recycle Here SC” app or **visit** [this site](#) to learn where you can recycle locally.



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



Plan your trip with [public transportation](#).



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



Register to vote.



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