Climate Health Risks in New York State

**Tick-Borne Disease**
As the climate warms, tick season is starting earlier in New York State. In the Finger Lakes, an 8-year-old girl presented to a clinic with severe headaches, double vision, insomnia, stomach pain, chest pain, and problems concentrating in school. A blood test revealed Lyme disease. Her family was not aware she had been bitten by a tick. Cases like this are becoming more regular in the region and highlight the importance of tick checks after outdoor activities.

**Harmful Algae Blooms**
Rising water temperature from climate change can cause harmful algae blooms (HAB). This excessive algae growth leads to the release of harmful toxins which can cause skin, respiratory, and gastrointestinal irritation to those exposed to the water. Skaneateles Lake in Onondaga County is the main drinking water source for hundreds of thousands of families. In 2017, the lake had its first documented HAB with increasing amounts every year since limiting swimming. Fortunately, the toxins have not made it into the drinking supply yet, but that will be an increasing concern as the climate continues to warm.

**Inland Flooding**
Heavier rainfall means greater risk of flooding for waterside communities. Lake Ontario in Niagara County has recently reached record high water levels. Residents who just a few years ago enjoyed the facilities on the lake have had their properties destroyed. These homes are now vacant as a result of the flooding. Local organizations like PUSH Buffalo are working to protect affordable and safe housing while also fighting climate change.

**Extreme Heat**
Upstate counties like Saratoga could see as many as three times more episodes of extreme heat in the coming decades. Heat can have an especially detrimental effect on the physical and mental health of those without adequate access to air-conditioning.

**Coastal Flooding**
Floodwaters can carry a variety of toxic chemicals that pose a real threat to children’s health. Rising sea levels and more frequent hurricanes mean that coastal flooding is increasing in many areas of Long Island. In October 2019 high floods in Freeport brought back memories of Hurricane Sandy. In Lindenhurst, parents carried children to school buses to avoid floodwaters. The Shinnecock Indian Nation has placed boulders on the shore and restored the natural habitat of their shoreline to address coastal erosion.

**Mosquito-Borne Disease**
Across New York State changing weather patterns are likely to bring with them an increase in diseases spread by mosquitoes. In 2019 mosquitoes testing positive for West Nile virus were found for the first time in Westchester County. With more climate change, there could be a significant rise in risk of such diseases.

**Air Quality**
Climate change is increasing the length of the pollen season and levels of local pollutants, especially high in large cities. This is especially bad news for sufferers of allergic asthma living in urban areas. In recent years New York City has documented rising rates of asthma-related emergency department visits, especially in summer months when air quality is worst or pollen levels are up.