# CLIMATE CHANGE AND CHILDREN'S HEALTH

#### CLIMATE CHANGE HARMS KIDS TODAY

Climate change is not in some far off future. It is happening now.

We are experiencing increased temperatures, more extreme weather events, rising sea level, an extended pollen season, and shifting ranges of disease-carrying insects.

Our children are already suffering from the effects of climate change, and will continue to suffer the health consequences – until we limit carbon emissions

> from power plants, end fossil fuel subsidies, and transition to a clean energy economy.

#### HEAT-RELATED ILLNESSES

Scientists predict global temperature increases of 2-II<sup>o</sup>F by the end of this century.

The urban heat island effect – a result of the amount of concrete (which holds heat) and the lack of tree cover – makes urban areas hotter than others. More than 80% of Americans live in urban areas.

Children are especially vulnerable to heat exposure because they do not have fully developed temperature-regulation mechanisms. Heat causes problems such as mild heat rash, dehydration, heat exhaustion, and deadly heat stroke.

In addition, high temperatures have other important

health impacts: they can diminish school performance, lead to pregnancy complications, cause renal effects, and make heart and lung problems worse.

#### INSECTS AND INFECTIONS

A warming world alters the habitat and lifecycle of many insects, including those that that carry disease. An



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altered ecosystem is already changing the range of the ticks and mosquitoes that carry Lyme disease and West Nile virus. Scientists predict that incidence of malaria and Dengue fever, among other vector borne illnesses, will likely increase as pathogens enter previously uninfected areas.

Climate change fuels extreme weather events, which can compromise infrastructure such as sewage systems, refrigeration, and water treatment facilities, and potentially increase the transmission of food- and

> water-borne bacterial diseases such as cholera. Children are especially vulnerable to the lifethreatening impacts of diarrheal diseases.

### ALLERGIES

In addition to increasing smog pollution, climate change has increased

the length and severity of pollen seasons. Pollen season has already lengthened by 2 weeks since 1995 (nearly 4 weeks in northern latitudes), and total pollen count is on the rise. Ragweed pollen production increases with heat and carbon dioxide; this allergen can trigger asthma attacks and

> cause severe discomfort among children with allergies.

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#### **ASTHMA**

Smog, or ground level ozone– on the rise as temperatures climb– is a powerful

lung irritant that can trigger asthma attacks and interfere with lung development, among other health problems. The Intergovernmental Panel on Climate Change predicts that climate change will increase levels of ground level ozone in urban areas.

Children suffer the most from the health impacts of ozone pollution, which contributes to asthma, reduced lung function, and increased

sensitivity to irritants and allergens, as well as chest pain, coughing, and nausea even in healthy children.

#### FOOD INSECURITY

Drought, extreme weather events, limited availability

of fresh water, rising temperatures, and changes in the range of insect pests will all impact the global food supply, potentially creating shortages of staple food crops and access

### to safe food and water.

When food is in short supply, children suffer disproportionately. Malnutrition can also interact with infectious

> diseases, making infections more severe and their impact more serious.

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## ARMED WITH THE FACTS

#### DISASTER-RELATED INJURIES

Climate change is altering weather

patterns including more extreme weather events such as heatwaves, storms, drought, fires, and rain. Stronger and more frequent hurricanes, typhoons, tornadoes, and floods, coupled with population growth in coastal and urban areas, will increase the risk of injury, death and drowning in weather

> emergencies. Children are especially susceptible to these grave health impacts.

#### WHAT MOMS CAN DO

Limit your own contribution to carbon pollution by eating less meat, insulating your home, and driving less. But this problem requires large-scale action.

**BE AN ENGAGED CITIZEN**. Tell the President, Congress, your mayor—and anyone else who will listen—that you are deeply concerned about climate change, and they should be too.

**BE DEMANDING.** Demand that your lawmakers use their leadership to convey the urgency of this global disaster. Remember, they work for you.

**PROTECT THE CLEAN AIR ACT**. Join our campaigns to strengthen the Environmental Protection Agency's efforts to reduce carbon, soot, ozone, and methane pollution.

#### SUPPORT RENEWABLES.

Tell your power company and your governor—you want more renewable energy sources like wind and sunshine in your electricity mix.

