

# Unequal Health Vulnerability in a Heatwave



Certain populations are more vulnerable to the impacts of climate change, and disproportionately experience health harms from it, widening existing health disparities. This graphic shows how four people in an urban area are impacted by a heatwave, which are becoming more frequent and severe due to climate change, to highlight examples of vulnerability and adaptation.

		Sasha   AGE: 6   BLACK	Mary   AGE: 23   WHITE	Cesar   AGE: 42   LATINX	Young   AGE: 81   ASIAN
<p><span style="color: red;">■</span> RISK FACTOR</p> <p><span style="color: blue;">■</span> PROTECTIVE FACTOR</p> <p><small>A/C = air conditioning</small></p>					
<b>KEY HEALTH RISK</b>		Asthma attack from air pollution	Birth complications	Death from heatstroke	Heat-related heart failure
<b>VULNERABILITY CATEGORY</b>	<b>SUSCEPTIBILITY</b>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Child</li> <li><span style="color: red;">■</span> Asthma</li> <li><span style="color: blue;">■</span> Otherwise healthy</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Young adult</li> <li><span style="color: red;">■</span> Pregnant</li> <li><span style="color: blue;">■</span> Healthy</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Middle age</li> <li><span style="color: red;">■</span> High blood pressure</li> <li><span style="color: red;">■</span> Medication increases heat sensitivity</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Older age</li> <li><span style="color: red;">■</span> Heart condition</li> <li><span style="color: red;">■</span> Medication increases heat sensitivity</li> </ul>
	<b>EXPOSURE</b>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Person of color*</li> <li><span style="color: red;">■</span> Lives by sources of air pollution</li> <li><span style="color: red;">■</span> Air pollution worsened by heat</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Apartment with poor insulation</li> <li><span style="color: red;">■</span> Subway to work doesn't have A/C</li> <li><span style="color: blue;">■</span> A/C at work</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Person of color*</li> <li><span style="color: red;">■</span> Works outside in the sun</li> <li><span style="color: red;">■</span> No A/C at home</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Person of color*</li> <li><span style="color: red;">■</span> Room on top floor</li> <li><span style="color: red;">■</span> Poor A/C in nursing home</li> </ul>
	<b>ABILITY TO ADAPT</b>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> Inadequate health insurance</li> <li><span style="color: blue;">■</span> Middle class</li> <li><span style="color: blue;">■</span> Good family support</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Health insurance</li> <li><span style="color: red;">■</span> Poor</li> <li><span style="color: red;">■</span> Lack of social support</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">■</span> No health insurance</li> <li><span style="color: red;">■</span> Undocumented immigrant</li> <li><span style="color: blue;">■</span> Good social support</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> Health insurance</li> <li><span style="color: blue;">■</span> Middle class</li> <li><span style="color: red;">■</span> Limited mobility</li> </ul>
<b>HEALTH OUTCOME</b>		 Visits emergency department for an asthma attack	 Struggles to protect herself from heat but delivers a healthy baby	 Develops heatstroke and nearly dies	 Long hospitalization for heart failure
<b>ADAPTATION ACTION</b>		Real-time air-quality surveillance program sends warnings to vulnerable residents when pollution levels are high	Doctor is further educated on how heat impacts clinical practice and proactively counsels on heat risk throughout pregnancy	State health officials institute new heat-safety regulations to protect outdoor workers	Nursing home implements a heat emergency protocol to protect patients and invests in A/C improvements

\*Statistically, people of color are exposed to environmental harms at disproportionately higher rates. Therefore, we are including it here as a risk factor for exposure. Disclaimer: These fictional characters were created for illustrative purposes to highlight vulnerability, and certain vulnerabilities can exist in more than one category.