Behavioral Design for Public Policy

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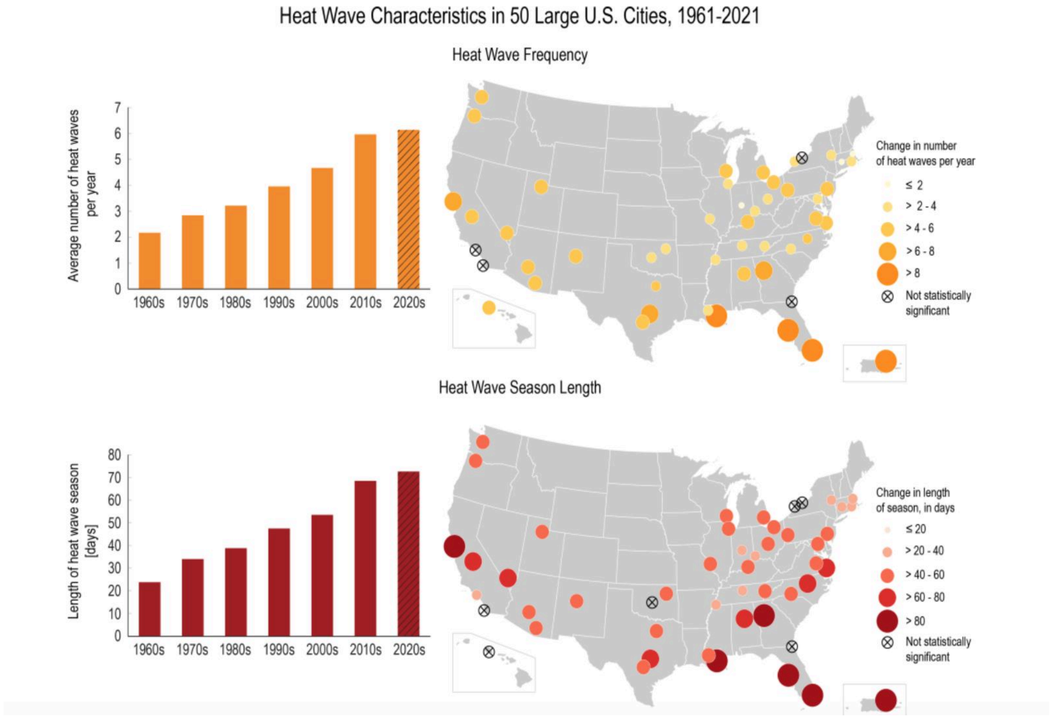
Extreme heat is a growing global threat, with its frequency and intensity on the rise.

As the deadliest natural disaster—claiming more lives than hurricanes, floods, or wildfires—it demands urgent action to safeguard vulnerable communities.



People with **chronic conditions** face heightened risks from extreme heat, which drives most **heat-related deaths** and is worsened by its growing prevalence.

Highly Vulnerable

People with chronic conditions are more vulnerable to extreme heat, which exacerbates risks like heatstroke, heart strain, and kidney damage. It can worsen conditions such as cardiovascular, respiratory, mental health, and diabetes issues.

Burden Of Chronic Diseases

Chronic diseases, including cancer, diabetes, heart disease, stroke, Alzheimer's, and pulmonary conditions, are the leading causes of death and disability in Illinois, affecting over 6.7 million residents. With the aging population, these diseases will rise sharply in the next 20 years.

>80%

heat-related deaths estimated to occur in individuals with pre-existing chronic health conditions

Policies, infrastructures and choice conditions are framed with expected rational behaviours while the reality is far from it

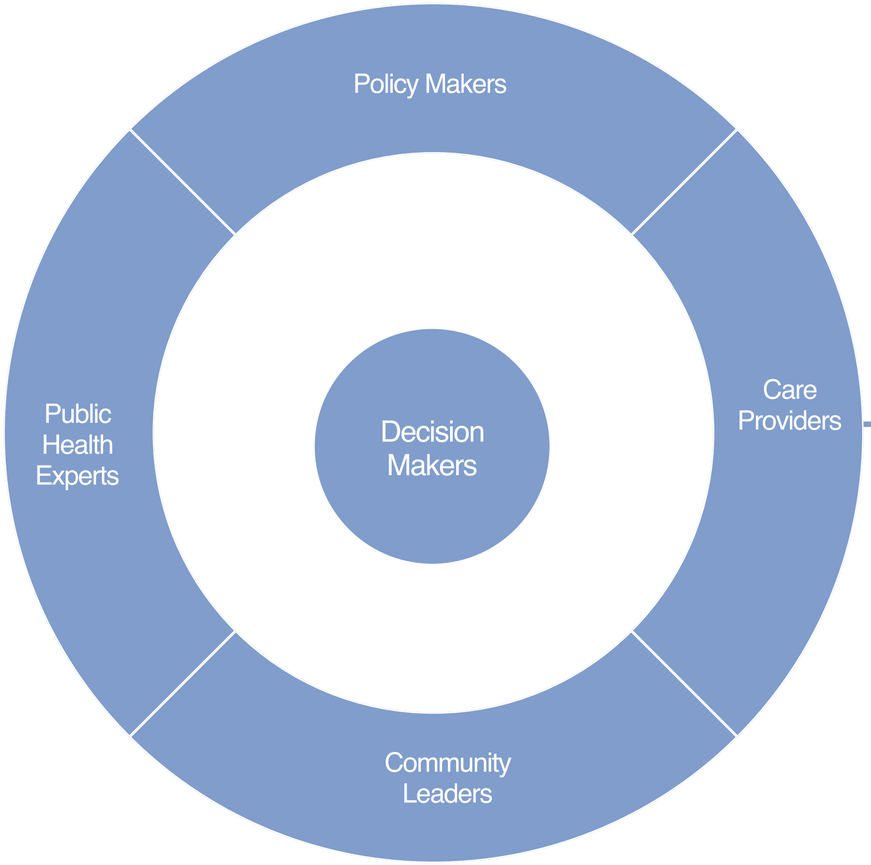
Expected Behaviour

- Drink Water and Stay Indoors
- Chronic conditions patients take medications regularly
- Take preventative measures to avoid heat stroke
- People are notified about extreme heat risk
- People are transparent about their health conditions

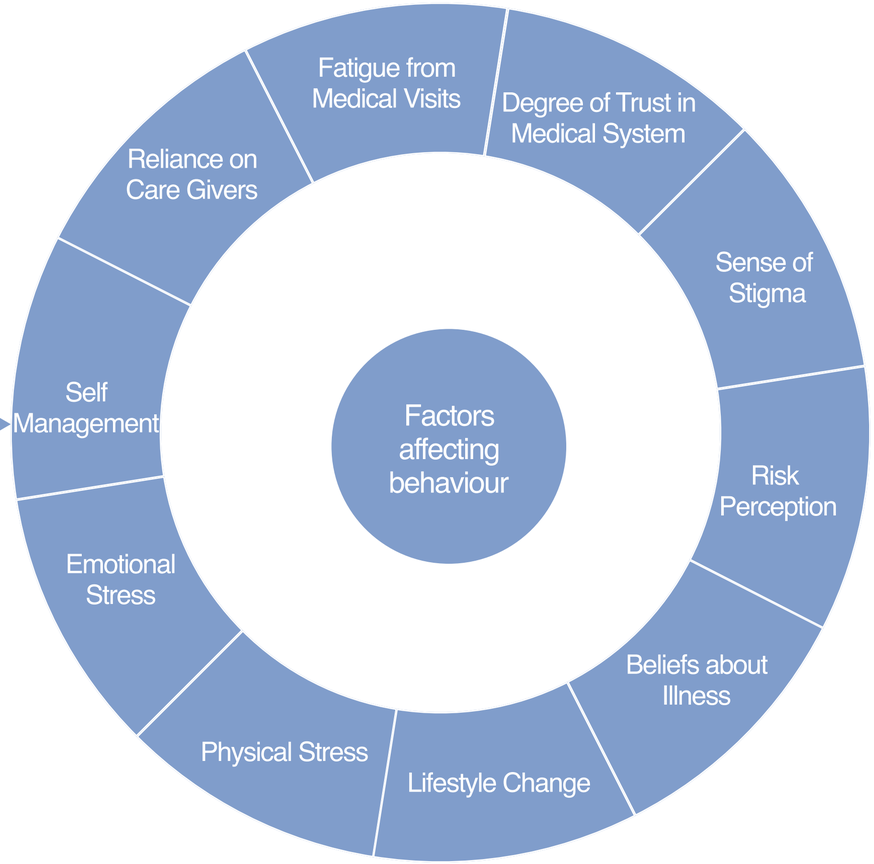
Reality

- People have varying levels of risk perception and awareness of the impacts of heat
- Medications are used strategically to reduce cost
- Avoiding healthcare expenses
- Individual variances in heat experiences
- Stigma and lack of trust prevents patients from being transparent
- Declining trust in healthcare system

Heat action policies often overlook the unique behavioral aspects and needs of individuals with chronic conditions.



LACK OF AWARENESS



Decision Makers who influence the system

Factors affecting behavior of people with chronic conditions

How can we help policymakers understand the complex daily realities that prevent people with chronic conditions from protecting themselves during heat waves?

Introducing Breaking Point—a tabletop game designed to raise awareness and spark discussion through immersive, experiential learning.

Interactive Approach To Shift Mindsets

A gaming approach provides interactive, engaging learning that shifts the mindsets of decision-makers and city planners through reflection and discussion.

Awareness About Behaviors And Trade-Offs

It aims to raise awareness and drive action in developing behaviorally informed heat action plans that address the daily trade-offs faced by people with chronic conditions in Chicago's neighborhoods.

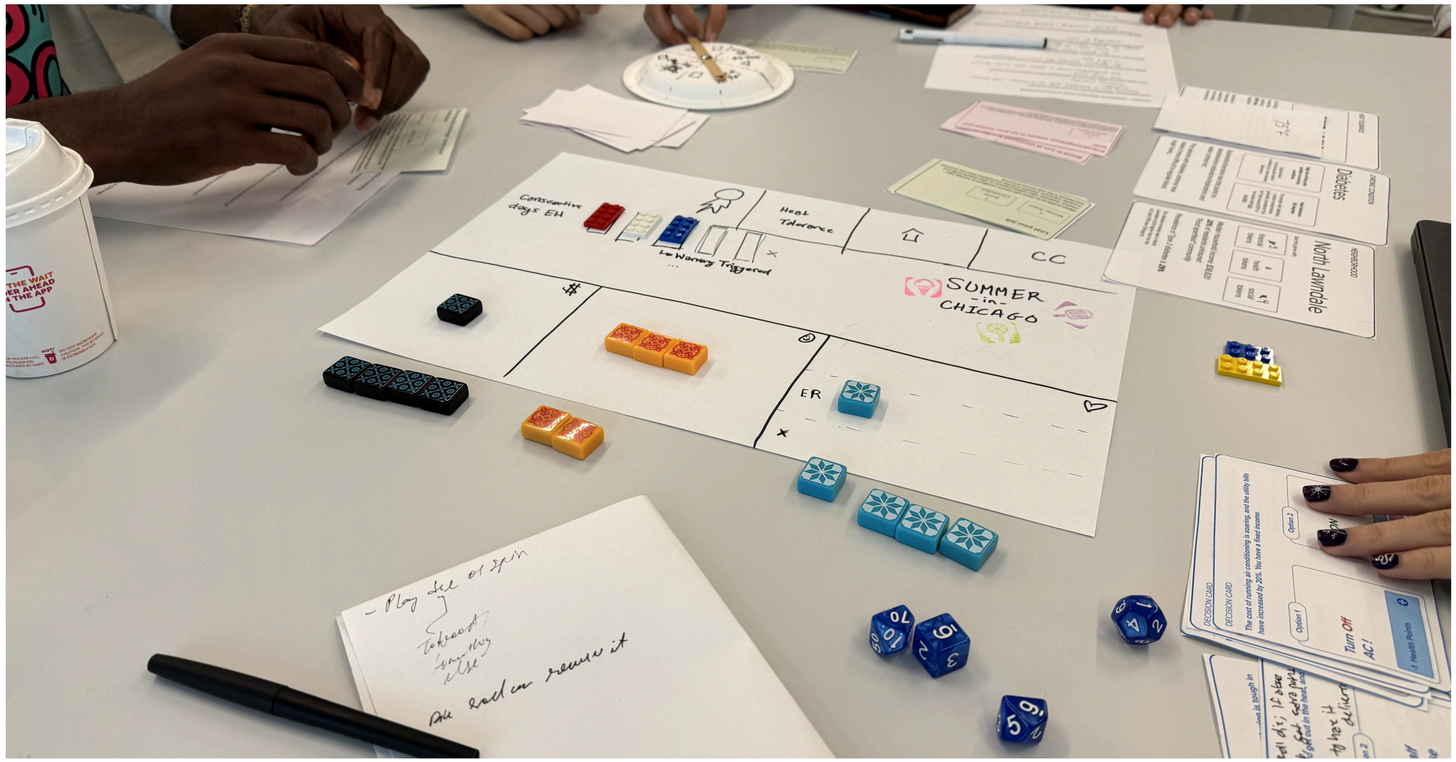
Using a co-opetition approach, the game reveals the daily behavioral challenges in decision-making, and constraints faced by individuals with chronic conditions.

Players work together to maintain the physical, financial, and social health of a Chicago community during peak summer and extreme heat events.

Health, Social Connection and Money Tokens are used to show tradeoffs those with chronic conditions have to make on a day-to-day basis.

Health, Social Connection and Money Tokens are crucial stocks of resources that the players have to balance.

Each chance presents either reduction or addition in the resources just like a person with chronic condition would experience.



Neighbourhood and Chronic Condition Cards highlight the vulnerabilities of neighbourhoods in Chicago and those with chronic conditions.

Neighbourhood Cards: Historical Legacies Of Structural Racism + Asset-Based Approach

Englewood

Humboldt Park

North Lawndale

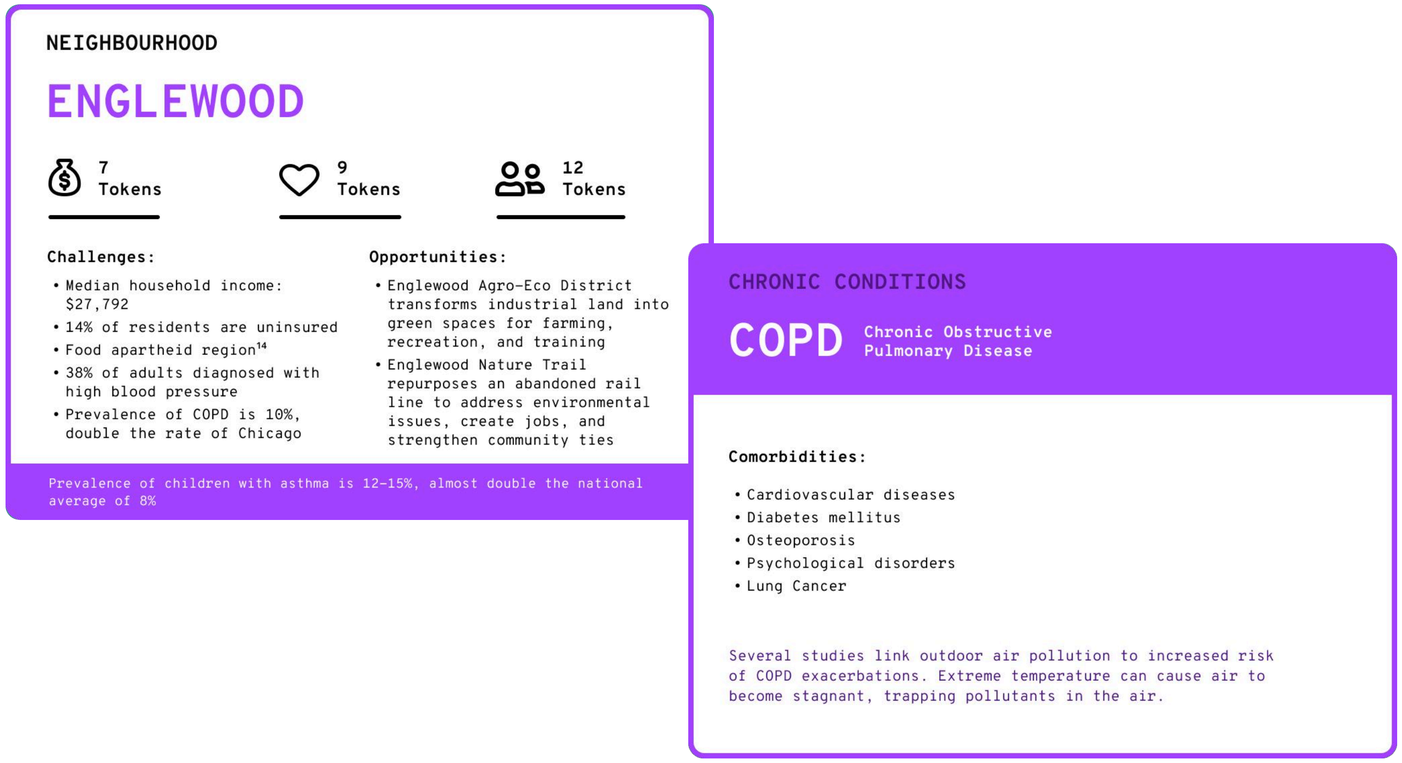
Chronic Condition Cards: Introduces Conditions That Are The Most Sensitive To Heat

Diabetes

Kidney Disease

Respiratory Diseases

Heart Disease



Decision Cards reveal how every choice has a consequence and the unexpected trade-offs that those with chronic conditon’s have to make.

Decision cards present scenarios that require the group to discuss and agree on a collective choice.

The back of the card outlines the consequences of their choice and provides insights into the behavioral reasons behind decisions made by individuals with chronic conditions.

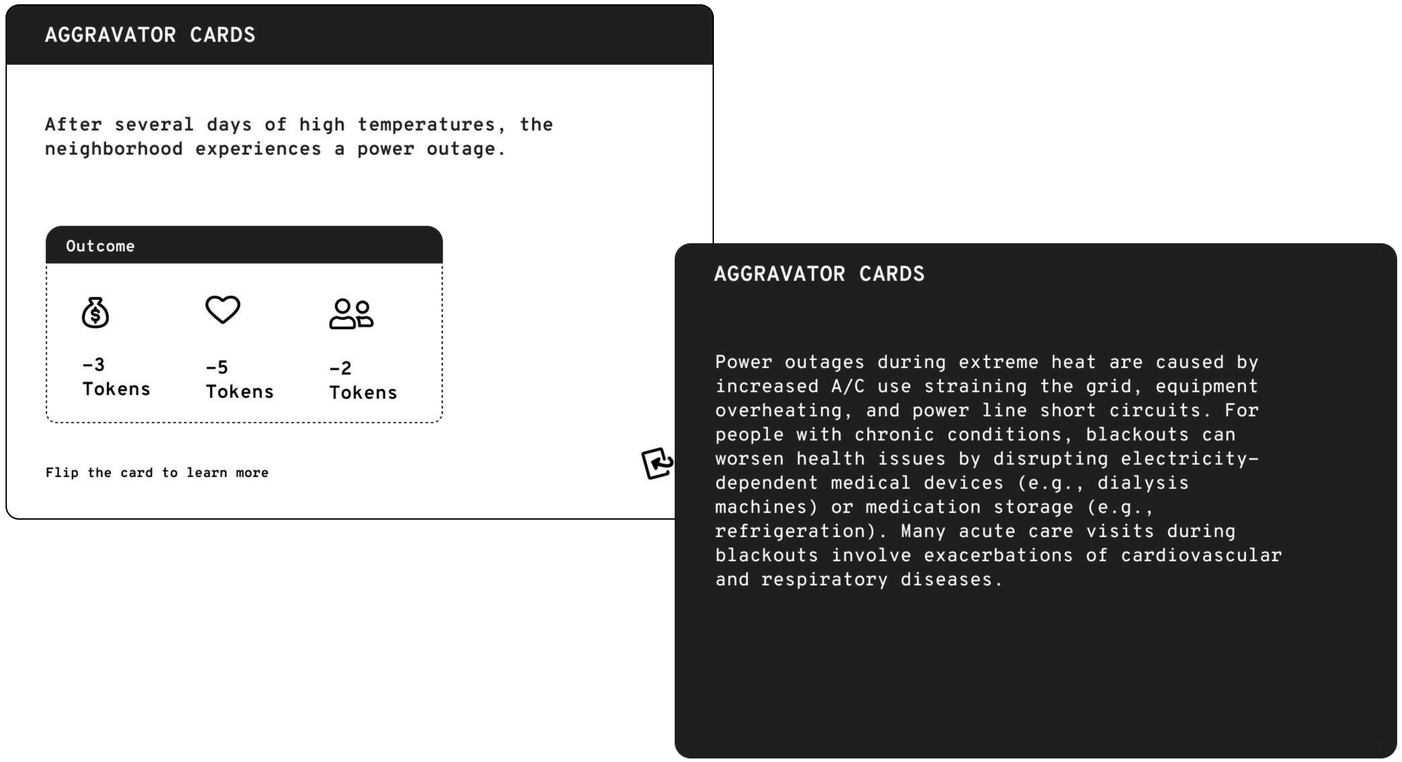
Situation Cards depict events beyond the control of those with chronic conditions, highlighting moments when choice and agency are limited.

These cards highlight system failures and infrastructural barriers.

In the context of the game, they represent events out of the player's control, that can have positive or negative effects determined by a die roll.

Aggravator Cards represent the compounding effects of ill fortune that may befall upon those with chronic conditions and the effects of it.

These cards put the players in a situation where a rare event may determine how the choices may be made going forward in the game.



Reflection Points prompt participants to discuss insights, consider how they would act differently based on new knowledge, and to how apply these learnings.

Reflection points are embedded the end of each round which is after 6 turns of play.

At these points the narrative of the game shifts to mimic the conditions those with chronic conditions experience during extreme heat events.

BREAKING POINT BREAKING POINT

Reflection Point #1:

Individual & Community Impacts

What have you learned about managing chronic conditions during heat events?

- Which trade-offs between health, money, and social connections surprised you?
- What barriers prevented people from making optimal health choices?
- How did social connections influence resilience?

What community resources proved most crucial?

- How accessible were cooling centers and other resources?
- What gaps did you notice in the support system?
- How did neighborhood differences affect outcomes?

Looking ahead to the next rounds:

- What strategies might you change?
- What resources do you wish were available?

Reflection Point #2:

Systems & Barriers

What systemic issues have become apparent?

- How did housing quality affect health outcomes?
- What role did transportation access play?
- How did income limitations impact adaptation strategies?

Consider your professional role:

- How does this experience connect to your work?
- What partnerships could improve heat emergency response?
- What preventive measures could be implemented before summer?

As you enter the final round:

- How might different agencies better coordinate?
- What immediate changes seem most crucial?

Intended Outcomes: Awareness leading to action

Our approach focused on creating awareness among policymakers that can lead to action towards developing behaviorally informed heat action plans/policies that take into account the day-to-day tradeoffs people living with chronic conditions face across the neighborhoods of Chicago.

Lets play?

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Questions?

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Thank You

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