By Bea Malsky, A/V Specialist
Game Changer Chicago

Infection City is an asymmetrical board game about epidemiology, vaccines, public health resource distribution, and meningitis. Intended for use in high school classrooms, *Infection City* enlists its most treacherous player as an insidious infection and the rest as a team of epidemiologists defending the city of Chicago with a strategic mix of direct treatment and preventative vaccination. The game asks its players to think systemically on a city level about the distribution of resources—from the perspective of both doctors and the disease—and strategize around an infection spread pattern playing out in real time.

A key takeaway of the game is the social nature of disease outbreaks and treatment. In *Infection City,* the disease and epidemiologists literally play by different rules—while the city officials must follow ward boundaries and invest time in treatment and building up vaccine resources at clinics, the meningitis player schemes from a set of available spread patterns and reacts to natural and human forces. Though the game's abstraction of Chicago begins with equally-distributed resources, it quickly spins out into pockets of vulnerable populations based on how the players allocate clinics.

Infection City grew out of our Hexacago Health Academy summer program, part of a long-term, game-based science and health study. It is one of several board games we are developing at Game Changer Chicago that take place on a map of Chicago laid out in hexagons, showing intricate systems as they play out across the city; other games are concerned with teen pregnancy, sexually transmitted diseases, and birth control.

In the case of *Infection City,* we've seen positive feedback in user testing around changes in belief toward vaccination and knowledge of meningitis. Of the students who completed both the pre- (before playing the game) and post- (after playing the game) evaluations, participants reported a significant increase in perceptions of meningitis risk without vaccination, belief in meningitis vaccine effectiveness, and individual willingness to be vaccinated. What's as exciting is that 92.8% of youth considered the game "effective in helping young people learn how to prevent meningitis" and that close to 70% agreed that the program was "easy to learn from."

We hope that the future for *Infection City* holds a more expansive look at infectious diseases and their social and biological factors through differently skinned decks. Though originally designed for a curriculum about meningitis, the game could easily be reconfigured to be about HIV, influenza, or a fictionalized dystopian superbug.

We're looking for more Chicago high school classrooms to playtest *Infection City* this fall and winter! Get in touch at bmalsky@bsd.uchicago.edu if you'd like to bring the game to your students.