I. BROACH Environment / Simulator	II. Heat Alerts Policy Optimization and Assessment

I. BROACH Environment / Simulator

Sampling of Weather Trajectories (Exogenous)

Can augment with data from the same region

Bayesian Hierarchical Model of Hospitalizations

Fit on observational data

System is allowed to vary by time as well as by location

II. Heat Alerts Policy Optimization and Assessment

Constrained Reinforcement Learning and Evaluation
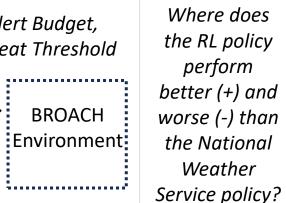
Done separately for each county

Alert Budget, Heat Threshold

Action

BROACH Environment

Reward, State

Post-hoc Contrastive Explanation

Where does the RL policy perform better (+) and worse (-) than the National Weather Service policy?

Considering county characteristics

Feature A

Feature B