

Running FRED Simulation via the Web

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This document describes how to set up FRED simulations using the FRED web site.

First, aim your browser at <http://fred.publichealth.pitt.edu>.

Note: If you access the site from a mobile device, you will be redirected to the mobile site. Click on the **Full Site** button to access the full web site from a mobile device.

Now click on the **Simulator** tab. The **Simulation Page** lets you request a FRED simulation for a specific location and epidemic scenario.

Setting Simulation Parameters

1. Choose a county and state from the pull-down menus. Alternatively, you can type in the name of a city, in which case the County and State menus will be ignored. To enter a city, use the format "CITY, STATE_ABBREVIATION", e.g. "Pittsburgh, PA"
2. Select epidemic parameters. You can select values of the basic reproductive rate R_0 from the pull-down menu. You can also select how many days to run the simulation.
3. Select control parameters. You can set values for selected epidemic mitigation control strategies. You can currently set School Closure and Immunization values.
 - **School Closure** is implemented on the basis of individual schools within the simulation area. Each school will close when a set number of cases occurs on a given school day. The number of cases is set by the "School Closure Trigger" menu. The duration of the school closure in weeks is set by the **School Closure Duration** menu.
 - **Immunization** means that the selected fraction of the population is immunized prior to the start of the epidemic.
4. Contact Information. If you enter an email address into the Contact field, you will be sent an email notification when the simulation results are ready (usually a few minutes.)
5. Click **Submit**.
6. The display will change to include a link to the Results page for the requested simulation. The results will be available immediately if the requested simulation has already been requested previously. Otherwise, the results should be available within a few minutes.
7. The results page for a FRED simulation includes:
 - The set of FRED parameters used to set up the job.
 - A movie showing the spread of the epidemic in the selected location.
 - Plots of the daily **Incidence**, **Prevalence**, and **Attack Rate** (cumulative incidence). The plots may also include the plots for the baseline case with no interventions.
8. You can also download the incidence and symptomatic_incidence data from the linked csv files.

Feedback?

We are very interested in receiving feedback about the FRED web site. Please send any comments or suggestions for new features to gref@pitt.edu. Thanks!