

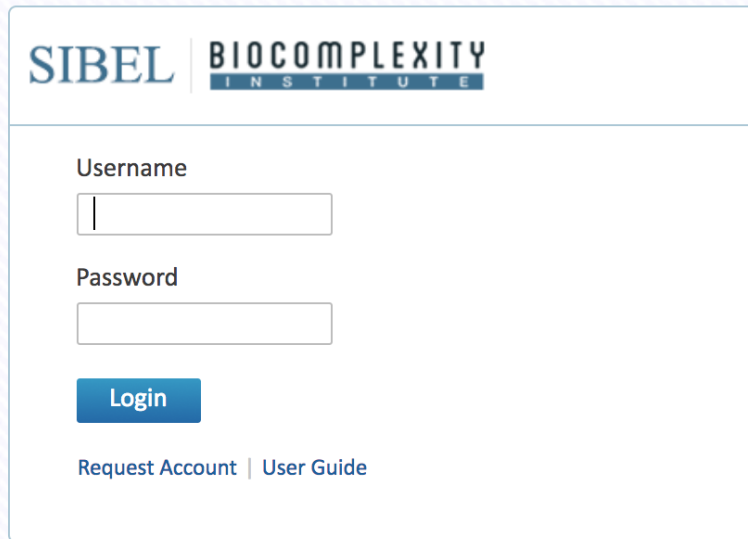
SIBEL Walkthrough

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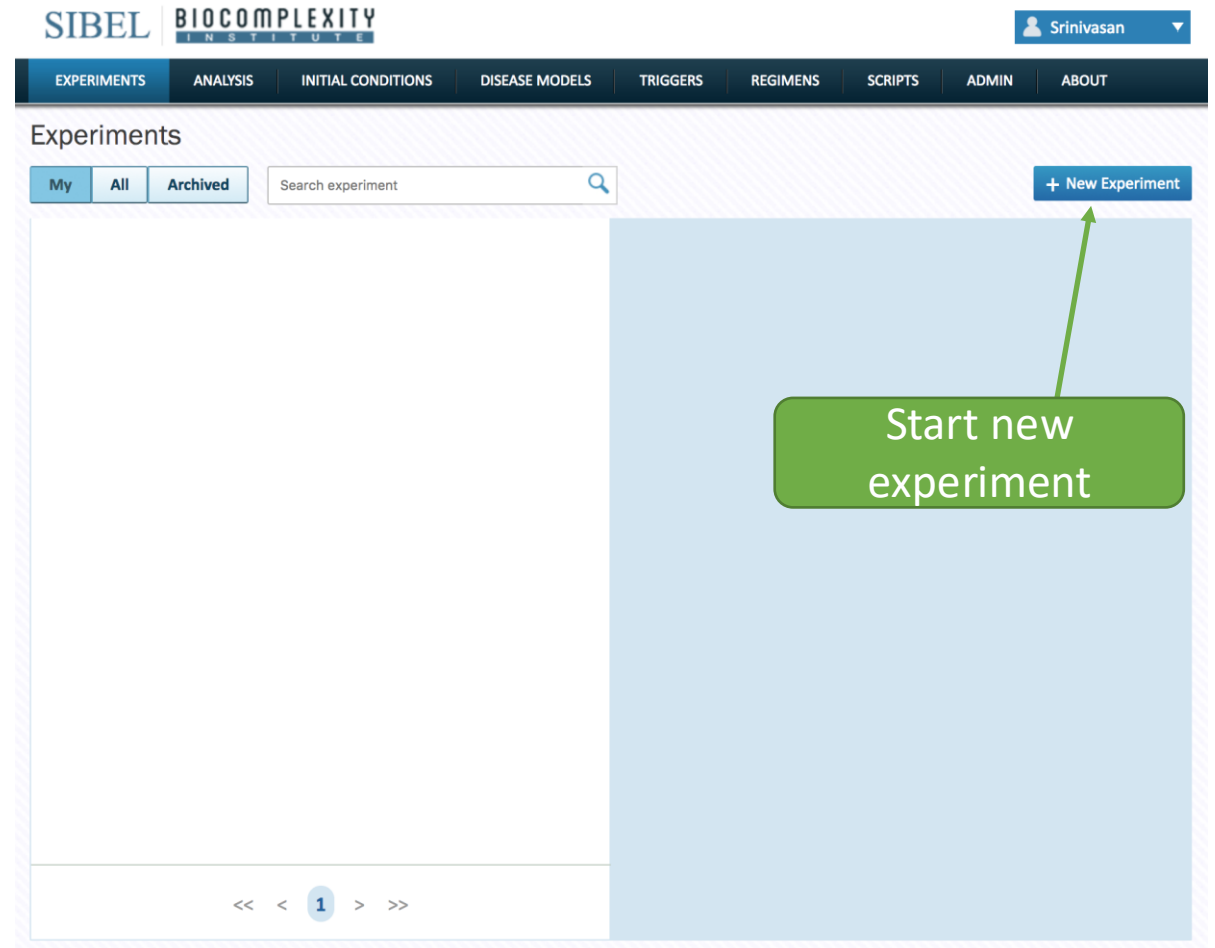
Welcome to SIBEL

Login screen



The login screen features the SIBEL BIOCOMPLEXITY INSTITUTE logo at the top. Below the logo, there are two input fields: 'Username' and 'Password'. A blue 'Login' button is positioned below the password field. At the bottom of the login area, there are two links: 'Request Account' and 'User Guide'.

sibel-demo.vbi.vt.edu



The dashboard shows the 'Experiments' section with a navigation bar at the top containing links for EXPERIMENTS, ANALYSIS, INITIAL CONDITIONS, DISEASE MODELS, TRIGGERS, REGIMENS, SCRIPTS, ADMIN, and ABOUT. The user 'Srinivasan' is logged in. Below the navigation bar, there are tabs for 'My', 'All', and 'Archived' experiments, a search bar, and a '+ New Experiment' button. A green callout box with the text 'Start new experiment' and an arrow points to the '+ New Experiment' button. The main content area is currently empty, and a pagination bar at the bottom shows '1' as the active page.

Basic Study Example

- **Model the spread of influenza in Montgomery County, VA**
 - Choose the appropriate region/population of interest
 - Setup a reasonable disease model (incubation and infectious period)
 - Choose a suitable initial condition (seeding)
 - Additional choices: Duration of experiment? stochastic replicates?
- **Implement the following interventions**
 - Vaccination
 - School Closure
 - Choices to make: Whom? When? How long? Compliance? Efficacy? ...
- **Test the effect of intervention parameters on disease outcome**
 - Which parameters? What are the suitable values?
 - What is the outcome of interest?

Create New Experiment

Experiment Details

Name ⓘ:

Description ⓘ:

Model ⓘ:

Script ⓘ:

of stochastic runs

Replicates ⓘ:

Duration of experiment

Simulated Days ⓘ:

Status ⓘ: New

Owner ⓘ: Vsrniv

Total cells ⓘ: 1

Intervention parameter sweeps

Empty Experiment

[Back](#) Montgomery county - Influenza... Not Runnable

Details

Replicates
10

Total Cells
1

Simulated Days
200

Model
EpiFast

Region

+

Select region

Initial Conditions

+

Select initial condition

Disease Models

+

Select disease model

Enabled Interventions

+

Define interventions

Region

Region :No Region Attached ⓘ

Mon

Montgomery County VA

Choose region
(loading synthetic
population)



Cancel

Save

Disease model

My

All

Archived

AL_25 Catastrophic flu

AL_25 Catastrophic flu c...

AL_25 Catastrophic flu_...

AL_25 Catastrophic flu_...

AL_25 Mild flu

AL_25 Moderate flu

AL_25 Strong flu

Catastrophic flu

Copy of BL

demo disease model

⏪

⏩

1

...

5

⏪

⏩

DiseaseModel :No disease model

+ New Disease Model

Details

Incubation period

Infectious period

Symptoms

Name ⓘ

AL_25 Strong flu

Modified On ⓘ

Jul 19 2017, 10:23

Owner ⓘ

sample

Transmissibility ⓘ

0.000042

Probability of transmission per minute of contact with an infectious person

Description ⓘ

Flu that should infect 30% of population <for other 25>

Archive

Duplicate

Delete

Cancel

Save

Disease model - Incubation period



Disease model – Infectious period



Disease model - Symptoms

MyAllArchived

AL_25 Catastrophic flu c...
AL_25 Catastrophic flu c...
AL_25 Catastrophic flu c...
AL_25 Catastrophic flu_...
AL_25 Catastrophic flu_...
AL_25 Mild flu
AL_25 Mild flu copy
AL_25 Moderate flu
AL_25 Moderate flu copy
AL_25 Strong flu

1<

<

...

3

...

2

>

>1

DiseaseModel :AL_25 Strong flu

+ New Disease Model

DetailsIncubation periodInfectious periodSymptoms

Symptomatic Proportion ⓘ
0.500
Asymptomatic Reduction ⓘ
0.330

What fraction are symptomatic?
% reduction in transmission probability asymptomatic individuals?

Initial condition

My All Archived Initial Condition :30eachfor5 [+ New Initial Condition](#)

15 on Day 0
2
20 persons firstday
20 persons firstday copy
20 seeds from school age
20 Seeds_5 New/wk
201stDay
20_first_day
30eachfor0
30eachfor5

Details **Condition**

☐ On Day 0 ☐ Everyday ☒ Daily Seed

When to seed?

Subpopulation ⓘ

☒ Type ☐ upload PIDs

Whom to seed?

Selection: All

Type: All

All

Duration (Days) ⓘ

5 Go

0
30
30
30
30
30

Days

1
2
3
4
5

30
30
30
30
30

How many to seed?

10 20 30 40 50 60 70 80 90 100

Infected People

3

Basic experiment

[Back](#) Montgomery County - Influenza...

Runnable

Details

Replicates

10

Simulated Days

200

Total Cells

1

Model

EpiFast

Region



Disease Models

AL_25 Strong flu

Incubation Period



Transmissibility : 0.000042 Symptomatic Proportion : 0.5 Asymp...

Infectious Period



Initial Conditions

30eachfor5

Daily Seed



Enabled Interventions



Define interventions

Interventions

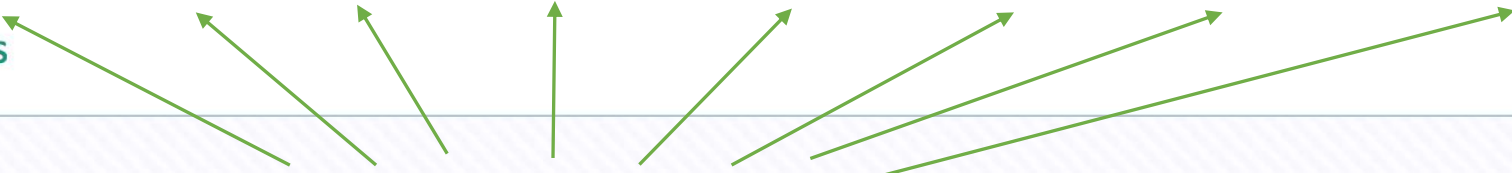
[Back](#) **Montgomery County - Influe...** Total Cells **1** [View Cells](#)

Enabled Interventions

 Summary	 Generic Intervention	 Vaccinate	 Social Distance	 Close Work	 Close School	 Pharmaceutical Treatment	 Pharmaceutical Prophylaxis	 Dynamic Sequestration
--	---	--	---	---	---	---	---	--

No enabled Interventions

Each intervention has its own set of parameters!



Vaccine Intervention

Enabled Interventions

Summary Generic Intervention **Vaccinate** Social Distance Close Work Close School Pharmaceutical Treatment Pharmaceutical Prophylaxis Dynamic Sequestration

Enabled Vaccine Interventions (1): Extra Vaccine Campaign + Create New

Intervention Name: Extra Vaccine Campaign

Subpopulation ⓘ

Selection: All ⓘ

Type: All ⓘ

Category	Total	Change Percentage
All	100% (74376)	100% (74376)

Trigger ⓘ

On Day ☒ % Infectious ☐ Every Day ☐

Days 30,45,60 ⓘ

Name: Days 30,45,60

Value: 30,45,60

Duration ⓘ

Default Exp Simulation Days ☒

Value ☒ Sweep ⓘ

200 days

Compliance ⓘ

☐ % Value ☒ Sweep ⓘ

Linear Customized

Initial Value	Final Value	Increment Value
30	90	30

Go

I1	30%
I2	60%
I3	90%

Efficacy ⓘ

☒ % Value ☐ Sweep ⓘ

70%

Rate Of Administration ⓘ

Rate Per Day Unlimited ☒

age-based
subpopulations,
set of PIDs

Whom?

Fixed days,
Trigger condition

When?

How long?

How compliant?

Parameter sweeps
(experiment cells)

How effective?

Availability per day

Close School Intervention

Enabled Interventions



Summary



Generic Intervention



Vaccinate



Social Distance



Close Work



Close School



Pharmaceutical Treatment



Pharmaceutical Prophylaxis



Dynamic Sequestration

Enabled Close School Interventions ⓘ:

Close Schools ▾

+ Create New

Remove school activities in the population

Intervention Name : Close Schools

Subpopulation ⓘ

Selection: All ✕

Type: All ▾

Category Total Change Percentage

All	100% (74376)	100% (74376)
-----	--------------	--------------

Whom?

Compliance ⓘ

☒ % Value ☐ Sweep ⓘ

100%

How compliant?

Duration ⓘ

☒ Default Exp Simulation Days

☒ Value ☐ Sweep ⓘ

200 days

How long?

Trigger ⓘ

New

☒ On Day ☐ % Infectious ☐ Every Day

Days 30,45,60 ▾

Name: Days 30,45,60

Value: 30,45,60

When?

Parameter sweep

Interventions Summary

Back

Montgomery County - Influe...

Total Cells **27** [View Cells](#)

Enabled Interventions

vaccine_compliance (3) * vaccine_trigger (3) * close_school_trigger (3)



Summary



Generic Intervention



Vaccinate



Social Distance



Close Work



Close School



Pharmaceutical Treatment



Pharmaceutical Prophylaxis



Dynamic Sequestration

Your Interventions

Vaccine

Extra Vaccine Campaign: All (74376) ✖

Close School

Close Schools: All (74376) ✖

Disease model Summary

Back

Montgomery County - Influenza...

Runnable

Details ✓

Replicates

10

Total Cells

27

Simulated Days

200

Model

EpiFast

Region ✓



Initial Conditions ✓

30eachfor5

Daily Seed

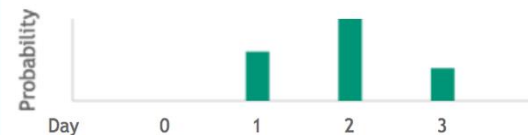


Disease Models ✓

AL_25 Strong flu

Transmissibility : 0.000042 Symptomatic Proportion : 0.5 Asymp...

Incubation Period



Infectious Period



Enabled Interventions ✓

Vaccine (1)
Close School (1)

Ready to Start!

My All Archived + New Experiment

[8034] Montgomery County - Influenza ...
New | Last Saved : Oct 04 2017, 14:43 | 27 Cells | Vsriniv

START
More Actions ▼

<< < 1 > >>

Montgomery County - Influenza Mitigations

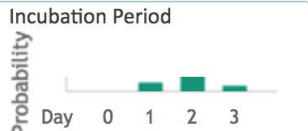
Details

Replicates	Simulated Days
10	200
Total Cells	Model
27	EpiFast

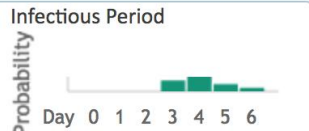
Region

Disease Models

AL_25 Strong flu

Incubation Period

Day	0	1	2	3
Probability	0	0.1	0.2	0.1

Infectious Period

Day	0	1	2	3	4	5	6
Probability	0	0	0	0.1	0.2	0.1	0

Initial Conditions

30eachfor5

Daily Seed

Day	0	1	2	3	4	5
Infected	0	1	1	1	1	1

Enabled Interventions

Vaccine (1)
Close School (1)

NETWORK DYNAMICS & SIMULATION SCIENCE LABORATORY

 VirginiaTech.
Biocomplexity Institute

Running...

My All Archived + New Experiment

Experiment ID

Experiment status

[8034] Montgomery County - Influenza ...

Running | Started : Oct 04 2017, 14:48 | 27 Cells | Vsrniv

START More Actions

Details

Replicates
10
Total Cells
27

Simulated Days
200
Model
EpiFast

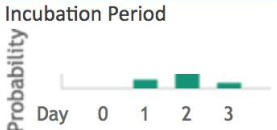
Region



Disease Models

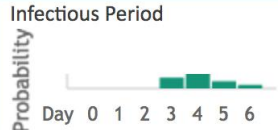
AL_25 Strong flu

Incubation Period



Day	0	1	2	3
Probability	0	0.1	0.2	0.1

Infectious Period



Day	0	1	2	3	4	5	6
Probability	0	0	0	0.1	0.2	0.1	0

Initial Conditions

30eachfor5

Daily Seed



Day	0	1	2	3	4	5
Infected	0	1	1	1	1	1

Enabled Interventions

Vaccine (1)
Close School (1)

<< < 1 > >>

View cells

My All Archived + New Experiment

[8034] Montgomery County - Influenza ...
Running | Started : Oct 04 2017, 14:48 | 27 Cells | Vsrniv

START
More Actions ▾

- Duplicate
- View Cells**
- Archive

Montgomery County - Influenza Mitigations

Details

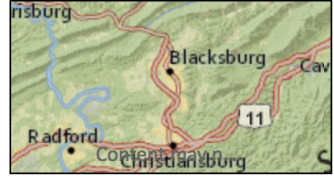
Replicates
10

Total Cells
27

Simulated Days
200

Model
EpiFast

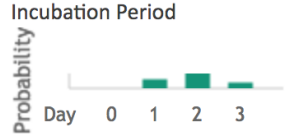
Region



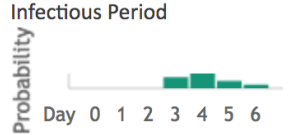
Disease Models

AL_25 Strong flu

Incubation Period



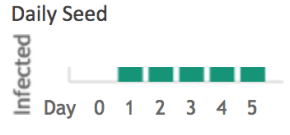
Infectious Period



Initial Conditions

30eachfor5

Daily Seed



Enabled Interventions

Vaccine (1)
Close School (1)

<< < 1 > >>

Cells

Experiment: **Montgomery County - Influenza Mitig...**

Total Cells: **27**

Cell ID

supercompute cluster

Cell status

Cell 95689 HASWELL Starting Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 30 View More	Cell 95690 HASWELL Starting Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 30 View More	Cell 95691 HASWELL VerifyingResults Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 30 View More	Cell 95692 HASWELL VerifyingResults Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 45 View More
Cell 95693 HASWELL Running Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 45 View More	Cell 95694 HASWELL Starting Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 45 View More	Cell 95695 HASWELL Running Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 60 View More	Cell 95696 HASWELL Starting Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 60 View More

Scroll to see all cells

[⏪](#) [⏩](#) 1 2 3 4 [⏪](#) [⏩](#)

Cells - View more

Intervention(s) - Cell 95689

Type : Vaccine
Name : Extra Vaccine Campaign

InterventionDuration 200
Trigger_type Day
Trigger_value 30
Trigger_delay 0
Compliance 30
Efficacy 70
RateOfAdmin UNLIMITED

Type : Close School
Name : Close Schools

InterventionDuration 200
Trigger_type Day
Trigger_value 30
Trigger_delay 0
Compliance 100

Cells complete!

Experiment: **Montgomery County - Influenza Mitig...**

Total Cells: **27**

Cell 95689 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 30 View More	Cell 95690 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 30 View More	Cell 95691 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 30 View More	Cell 95692 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 45 View More
Cell 95693 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 45 View More	Cell 95694 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 45 View More	Cell 95695 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 60 View More	Cell 95696 HASWELL Complete Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 60 View More

Run Complete!

My All Archived + New Experiment

[8034] Montgomery County - Influenza ...
Complete | Oct 04 2017, 14:58 (9 Mins) | 27 Cells | Vsrniv

[VIEW ANALYSIS](#)
[More Actions](#)

Montgomery County - Influenza Mitigations

Details

Replicates
10

Total Cells
27

Simulated Days
200

Model
EpiFast

Region



Disease Models

AL_25 Strong flu

Incubation Period
Probability vs Day (0-3)

Day	0	1	2	3
Probability	0.0	0.1	0.2	0.1

Infectious Period
Probability vs Day (0-6)

Day	0	1	2	3	4	5	6
Probability	0.0	0.0	0.1	0.2	0.1	0.05	0.0

Initial Conditions

30eachfor5
Daily Seed
Infected vs Day (0-5)

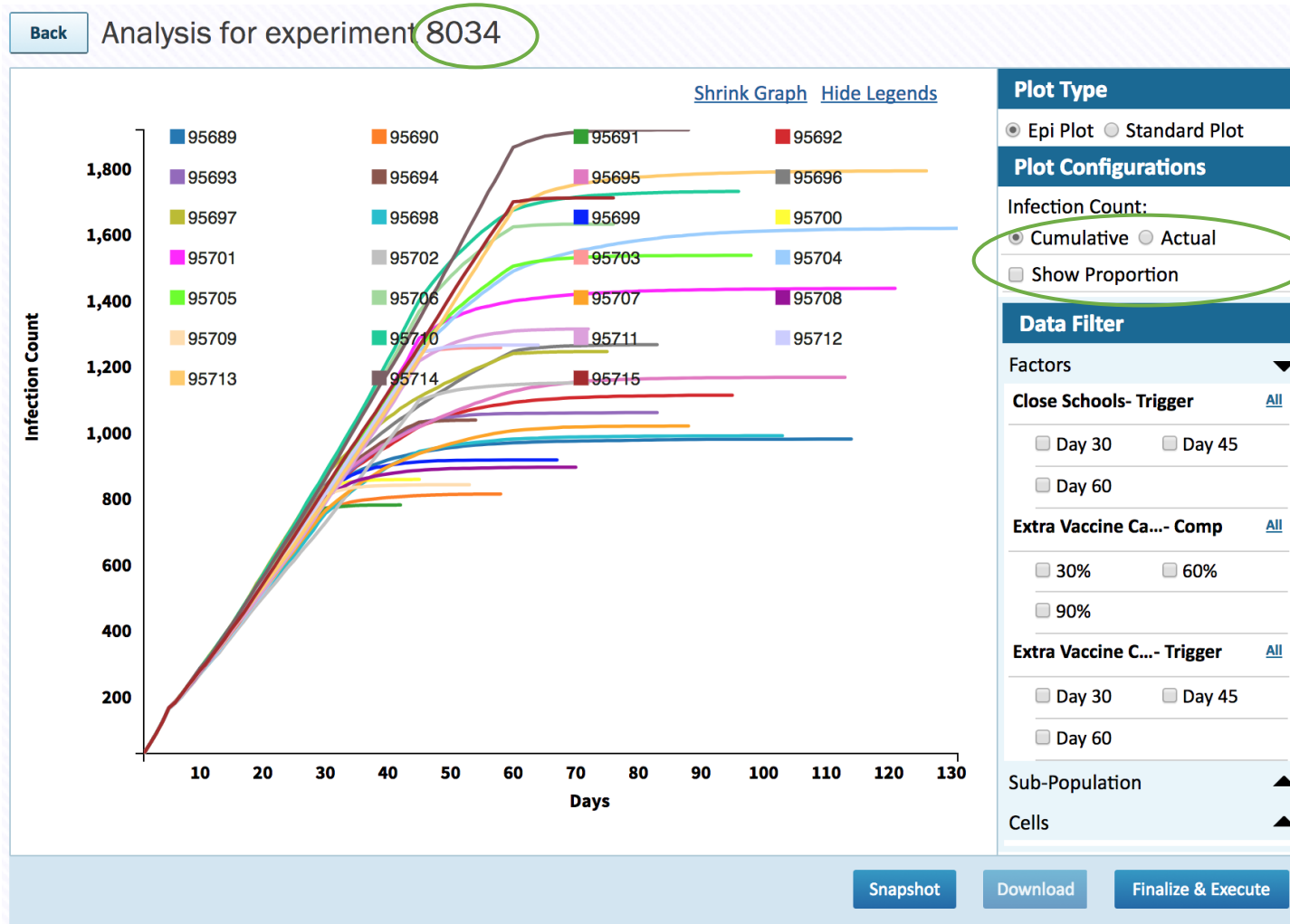
Day	0	1	2	3	4	5
Infected	0	1	1	1	1	1

Enabled Interventions

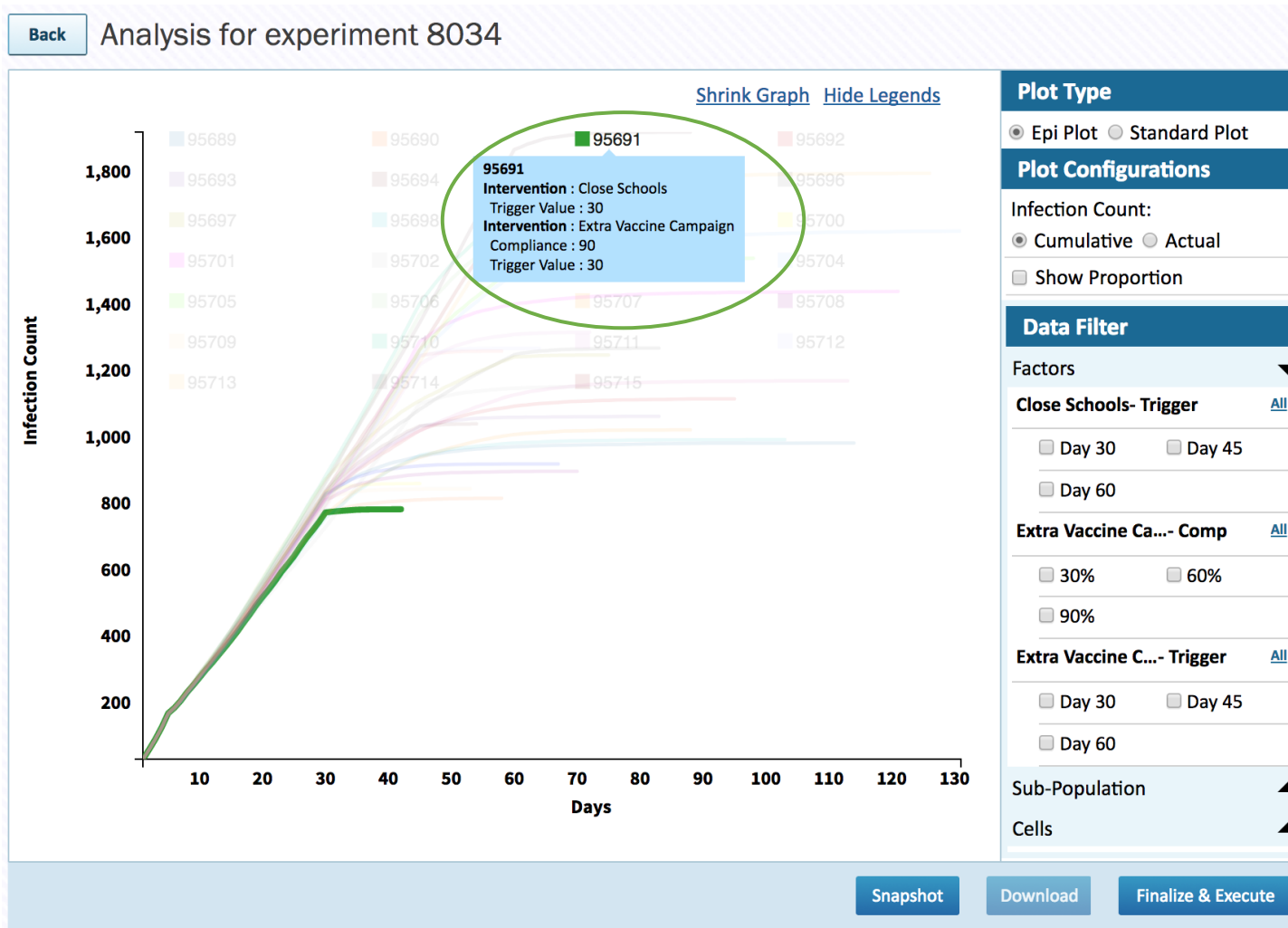
Vaccine (1)
Close School (1)

<< < 1 > >>

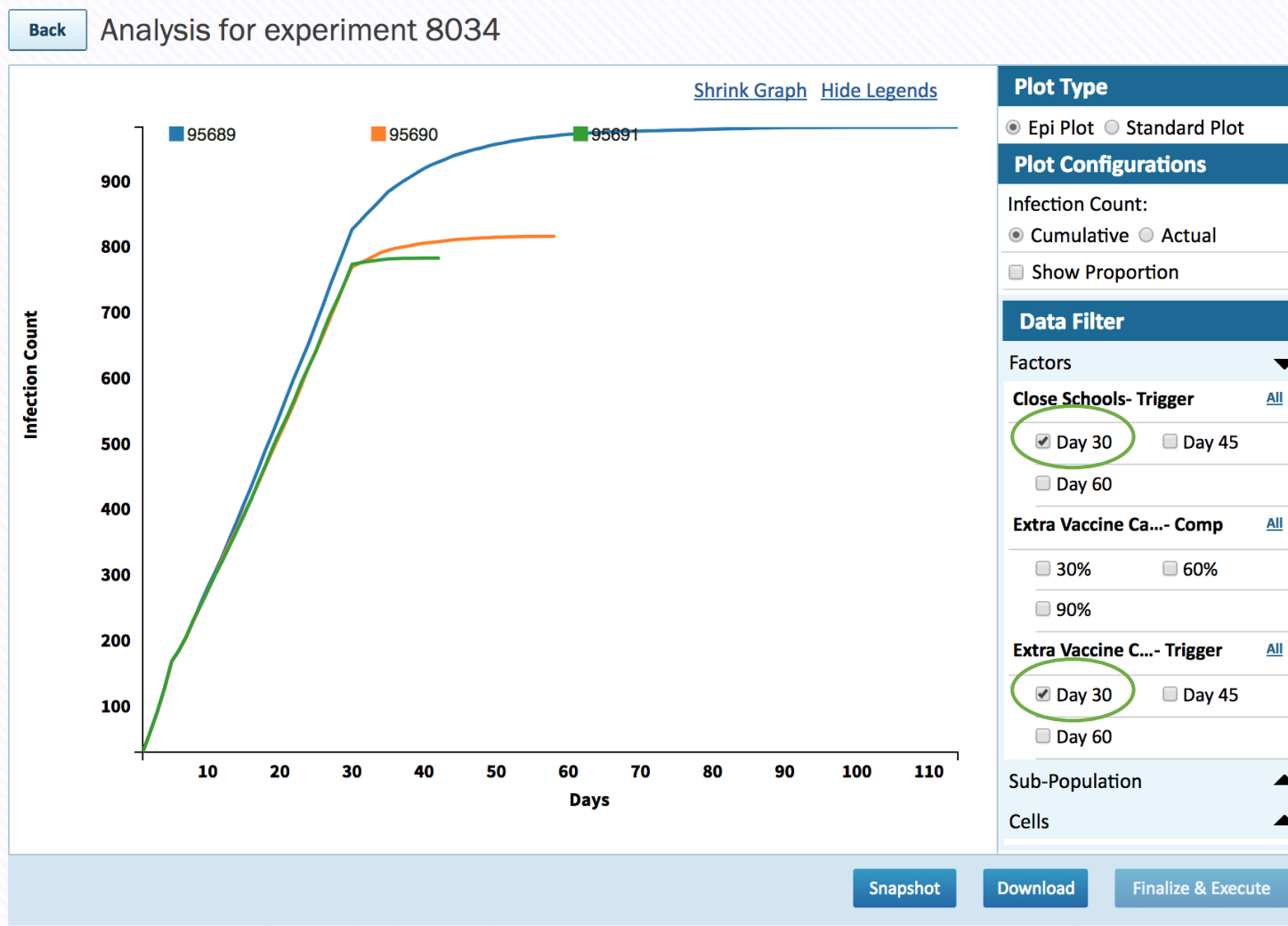
Analysis



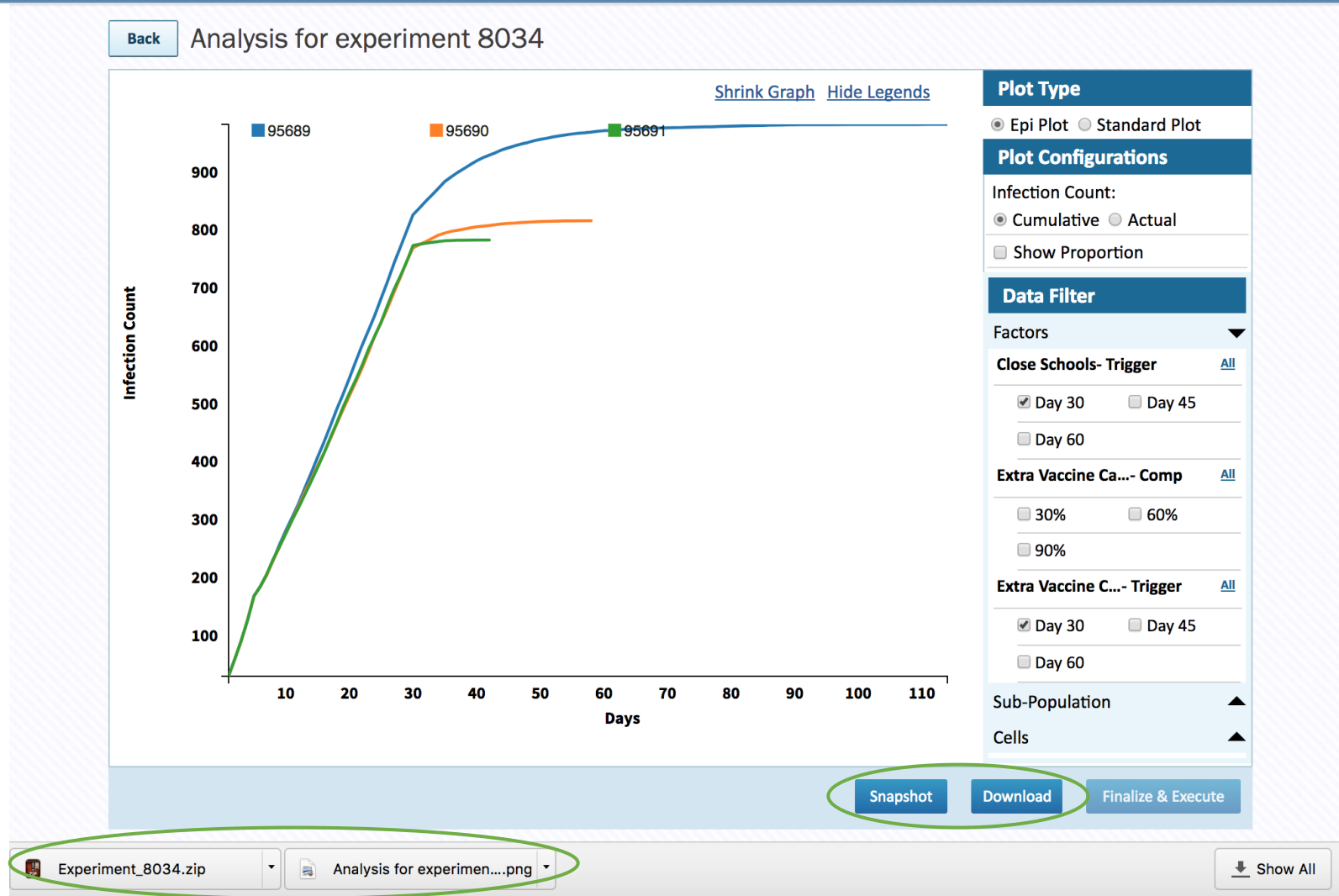
Analysis - Highlight



Analysis - Filter



Snapshot/Download



Archive

Experiment_8034



Cell-95689.xlsx



Cell-95690.xlsx



Cell-95691.xlsx



Cell-95692.xlsx



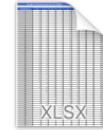
Cell-95693.xlsx



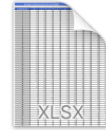
Cell-95694.xlsx



Cell-95695.xlsx



Cell-95696.xlsx



Cell-95697.xlsx



Cell-95698.xlsx



Cell-95699.xlsx



Cell-95700.xlsx



Cell-95701.xlsx



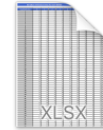
Cell-95702.xlsx



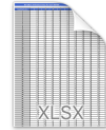
Cell-95703.xlsx



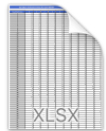
Cell-95704.xlsx



Cell-95705.xlsx



Cell-95706.xlsx



Cell-95707.xlsx



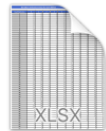
Cell-95708.xlsx



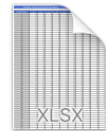
Cell-95709.xlsx



Cell-95710.xlsx



Cell-95711.xlsx



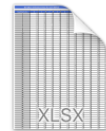
Cell-95712.xlsx



Cell-95713.xlsx



Cell-95714.xlsx



Cell-95715.xlsx



cellMetaData.xlsx

Cell Metadata

The screenshot shows an Excel spreadsheet with the title 'cellMetaData'. The 'Home' tab is active. The spreadsheet contains a table titled 'Experiment Details' with columns A through N. The table has a header row (A1) and several data rows. The data is organized into sections: 'Experiment Details', 'Differentiating factors for cells', and 'Cell 95689', 'Cell 95690', 'Cell 95691', 'Cell 95692', and 'Cell 95693'. Each section contains fields like 'Intervention Name', 'trigger_value', 'compliance', and 'trigger_value'. The 'Experiment Details' section is highlighted with a blue background. The 'Cell 95693' section is highlighted with a green background. The 'Experiment-Details' tab is selected at the bottom.

Experiment Details												
Name	Montgomery County - Influenza Mitigations											
Description												
Experiment ID	8034											
Differentiating factors for cells												
Cell 95689												
Intervention Name	Close Schools											
trigger_value	30											
Intervention Name	Extra Vaccine Campaign											
compliance	30											
trigger_value	30											
Cell 95690												
Intervention Name	Close Schools											
trigger_value	30											
Intervention Name	Extra Vaccine Campaign											
compliance	60											
trigger_value	30											
Cell 95691												
Intervention Name	Close Schools											
trigger_value	30											
Intervention Name	Extra Vaccine Campaign											
compliance	90											
trigger_value	30											
Cell 95692												
Intervention Name	Close Schools											
trigger_value	30											
Intervention Name	Extra Vaccine Campaign											
compliance	30											
trigger_value	45											
Cell 95693												
Intervention Name	Close Schools											
trigger_value	30											

The screenshot shows an Excel spreadsheet with the title 'cellMetaData'. The 'Home' tab is active. The spreadsheet contains a table titled 'Mean Infection Data' with columns A through M. The table has a header row (A1) and several data rows. The data is organized into sections: 'Mean Infection Data', 'ExposureDay/Cell Ids', and 'Cell 95689', 'Cell 95690', 'Cell 95691', 'Cell 95692', 'Cell 95693', 'Cell 95694', 'Cell 95695', 'Cell 95696', 'Cell 95697', 'Cell 95698', 'Cell 95699', and 'Cell 95700'. Each section contains numerical values. The 'Mean Infection Data' section is highlighted with a blue background. The 'Cell 95693' section is highlighted with a green background. The 'Mean-InfectionData' tab is selected at the bottom.

Mean Infection Data												
ExposureDay/Cell Ids	95689	95690	95691	95692	95693	95694	95695	95696	95697	95698	95699	95700
1	30	30	30	30	30	30	30	30	30	30	30	30
2	30	30	30	30	30	30	30	30	30	30	30	30
3	31.2	31.1	31.7	31.5	32.3	31.4	32	32	31.9	32.1	31.7	31.4
4	35.4	36.1	35.6	35.8	35.6	35.2	33.1	35	35.2	34.5	36.2	36.1
5	41.9	41	41	42.1	41.5	41.5	40.2	42.1	41.2	38.7	39.1	39.1
6	16.8	16.3	16.6	17.9	17	16.9	19	17	17.6	18.1	16.6	15.7
7	20.3	19.7	21.1	23.2	22.7	20.9	22	23.4	22.2	18.1	20.9	23.9
8	24.1	25.7	25.5	22.9	22	27	25.3	25.1	27.2	26.6	22.3	25.8
9	27	22.8	21.7	26.6	23.8	25.4	24.4	25	25.8	21.8	24.8	22.9
10	24.8	24.1	22.8	25.7	23.4	23	24.5	24.5	26.6	21.4	22.8	23.7
11	22.7	22.7	23.5	24.6	23.4	24.5	23.9	24.3	27.4	22	22.9	25
12	23.7	24	21.1	22.6	23.8	27.1	25.3	24.3	26	22.2	24.9	23.5
13	27.1	24.4	23.1	23.9	26.9	26.6	25.5	24.5	25	25	20.8	24
14	26	21.1	22.7	25.4	25.2	28.4	23.3	27.8	26.9	22.1	24.8	24.3
15	27	24.1	23.8	25.8	24.5	24.9	26.5	27.4	27.3	24	26.3	26.4
16	26	22.3	24.4	28.1	26.7	25.9	29.9	27.7	29.8	25.2	25.7	28
17	27.8	23.9	26.9	23.9	26.5	26.8	22.8	27.3	29.5	25.3	26.9	29.4
18	28.8	25.8	25.4	27.3	29.1	28.3	26.5	27.7	31.3	22.8	25.8	27.5
19	26	24.8	27.4	31.4	26.8	30.6	30.7	26.9	33.6	25.8	27.6	29.2
20	27.8	24	24.3	26.1	25.1	32.1	27.8	28.4	28.3	23.5	28.1	27.1
21	28.9	23.8	23	26.1	28.8	26.8	27.6	30.2	32.2	24.6	33	29.3
22	27.9	24.3	25.2	29.6	28.3	28.3	29.3	28.9	30.2	24.1	29.1	29.9
23	25.8	27	27.6	30.3	25.8	29.3	27.2	29.2	30.9	25.9	28.9	27.2
24	26.2	28.7	23	26.3	28.6	28.4	29.7	28	28.9	25.3	27.1	30.5
25	29.4	22.9	24.1	30.3	26.4	28.9	27.6	31.2	30.1	19.9	29.9	28.2
26	28.8	24.8	28.9	26.1	27.5	28.2	28	28	30.8	26	30	29.1
27	30.9	26.9	26.9	27.5	28.6	27.1	29.3	31.4	30.6	25.9	30.3	29.5
28	27.8	26	23.2	26.7	29.3	28	27.1	26.9	30.4	23.6	29.1	29.6
29	28.3	27.4	24.9	24.6	26.1	28.3	28.4	27.2	29.8	24.8	33.5	29.4
30	28.1	23.7	28.2	27.6	28.7	27.6	30.9	31.4	27.7	24.3	31.5	31.2
31	11.4	5.7	2	18.1	19.7	17.2	18.3	20.7	19	15.4	9	4
32	12	5.1	1.8	16.4	16.1	19.2	17.1	20.5	19.4	15.1	11	4.9
33	11.4	5.7	1.5	14.4	18.9	16.6	16.9	19.2	18.3	16.8	9.9	4.3
34	11.4	5.6	1.4	14.8	17.9	15	15.3	17.1	18.8	17.3	11.1	3.1

Archive

Experiment_8034



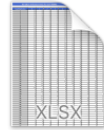
Cell-95689.xlsx



Cell-95690.xlsx



Cell-95691.xlsx



Cell-95692.xlsx



Cell-95693.xlsx



Cell-95694.xlsx



Cell-95695.xlsx



Cell-95696.xlsx



Cell-95697.xlsx



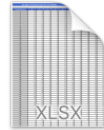
Cell-95698.xlsx



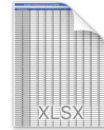
Cell-95699.xlsx



Cell-95700.xlsx



Cell-95701.xlsx



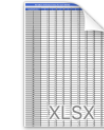
Cell-95702.xlsx



Cell-95703.xlsx



Cell-95704.xlsx



Cell-95705.xlsx



Cell-95706.xlsx



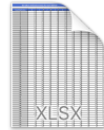
Cell-95707.xlsx



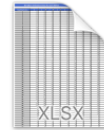
Cell-95708.xlsx



Cell-95709.xlsx



Cell-95710.xlsx



Cell-95711.xlsx



Cell-95712.xlsx



Cell-95713.xlsx



Cell-95714.xlsx



Cell-95715.xlsx



cellMetaData.xlsx

Individual cell

Iteration Infection Data for Cell 95689

Day/Replicates	0	1	2	3	4	5	6	7	8	9
1	30	30	30	30	30	30	30	30	30	30
2	30	30	30	30	30	30	30	30	30	30
3	33	33	31	32	30	31	30	31	31	30
4	33	33	32	36	35	38	36	35	41	35
5	39	41	42	45	44	42	44	40	42	40
6	20	18	18	27	13	9	21	17	12	13
7	21	21	14	16	23	26	22	20	18	22
8	26	17	17	28	22	28	30	19	25	29
9	16	28	34	28	18	24	40	28	28	26
10	19	21	18	29	25	26	36	25	27	22
11	26	23	19	19	26	22	26	22	21	23
12	24	23	30	20	26	21	17	23	30	23
13	20	15	21	31	27	28	38	33	22	36
14	21	26	20	31	29	25	39	20	28	21
15	26	17	31	26	36	26	25	24	25	34
16	22	15	26	30	27	21	31	29	21	38
17	20	33	35	17	23	20	35	32	30	33
18	26	21	19	25	41	40	42	24	28	22
19	34	16	26	20	23	18	33	32	22	36
20	17	17	40	23	30	26	24	25	41	35
21	17	25	34	21	30	36	28	43	24	31
22	22	23	26	26	24	30	26	33	36	33
23	21	14	29	27	22	26	38	31	22	28
24	13	25	30	24	27	32	35	31	16	29
25	16	29	42	20	22	23	40	30	27	45
26	21	32	29	26	41	22	29	36	24	28
27	21	26	31	31	29	34	40	41	28	28
28	14	21	25	23	33	36	33	35	30	28
29	14	37	33	21	30	23	46	38	16	25
30	20	27	39	22	33	28	34	30	21	27
31	2	15	13	8	13	11	14	11	12	15
32	4	21	11	3	15	11	20	16	5	14
33	9	20	10	9	10	6	13	17	9	7
34	8	19	9	5	13	13	11	9	15	12

Infection count for subpopulations of cell 95689

Day/Subpop Types	Adults	Preschool	School-age	Seniors	Critical worker	Tier 1	Tier 2	Tier 3
1	22.5	1.6	3.5	2.4	1.7	3.7	6.4	0.1
2	20.4	2.5	4.4	2.7	1.5	4.5	6.1	0
3	21.8	1.8	4.4	3.2	1.7	3.7	7.9	0
4	24.9	2.7	5.3	2.5	1.7	4.5	8.2	0
5	27.8	2.5	7.5	4.1	2.7	5.3	10.4	0.1
6	9.1	2.3	4.8	0.6	0.9	1.7	4	0
7	10.8	1.9	6.8	0.8	0.7	1.3	4.4	0
8	14.5	1	6.9	1.7	1.4	3	4.8	0
9	15.2	1.9	8.5	1.4	0.8	2.2	6.3	0
10	14.1	1.6	7.9	1.2	1.1	2.4	5.2	0
11	12.6	1.2	8.2	0.7	0.7	2	4	0.1
12	13.5	1.5	8.4	0.3	1.1	1.9	4.3	0
13	13.6	1.8	10.3	1.4	1.3	3.4	5.6	0
14	14.3	1.2	9.3	1.2	0.7	2.5	5	0
15	15.6	1.7	8.9	0.8	1.2	2.2	5	0.1
16	13.9	1	10.1	1	0.7	2	5.3	0
17	13.6	1.4	11.9	0.9	1	2.4	5.9	0
18	15	1.6	10.8	1.4	1.1	2.9	6.5	0
19	14	1.2	9.9	0.9	1.1	2.5	5.8	0
20	14.7	1.7	10.3	1.1	1.2	2.7	6.5	0
21	15	1.8	11.3	0.8	1.2	3.4	5.1	0
22	13.4	1.4	11.4	1.7	1.6	4.1	6.2	0
23	13.5	1.5	9.7	1.1	1.3	2.6	5.5	0
24	13.4	1.1	10.9	0.8	1	2.6	5.6	0
25	15.6	1.4	11.5	0.9	0.9	2.4	6.6	0
26	13.9	1.7	12	1.2	1.3	3.6	6.1	0
27	15.8	1.2	12.5	1.4	1.3	3.2	6.7	0
28	14.4	1	11.8	0.6	1.1	3.2	4.7	0
29	14.6	1.1	11.4	1.2	1	2.6	6.2	0
30	16.1	1	9.8	1.2	1.5	4	6.4	0
31	9.1	0.5	1.1	0.7	0.5	1.5	2.6	0
32	9.6	0.3	1.6	0.5	1.2	1.5	2.4	0
33	8.4	0.5	1.9	0.2	0.5	0.7	1.9	0
34	9.6	0.6	0.7	0.5	0.6	1.4	2.7	0

Archive/Duplicate Experiment

My All Archived + New Experiment

[8034] Montgomery County - Influenza ...
Complete | Oct 04 2017, 14:58 (9 Mins) | 27 Cells | Vsriniv

VIEW ANALYSIS
More Actions ▼

- Duplicate
- View Cells
- Archive
- Download

Montgomery County - Influenza Mitigations

Details

Replicates
10
Total Cells
27

Simulated Days
200
Model
EpiFast

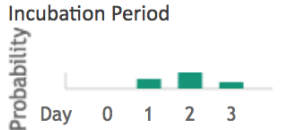
Region



Disease Models

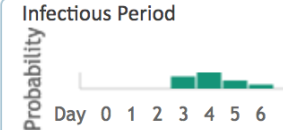
AL_25 Strong flu

Incubation Period



Day	0	1	2	3
Probability	0	0.1	0.2	0.1

Infectious Period

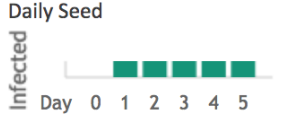


Day	0	1	2	3	4	5	6
Probability	0	0	0	0.1	0.2	0.1	0

Initial Conditions

30eachfor5

Daily Seed



Day	0	1	2	3	4	5
Infected	0	1	1	1	1	1

Enabled Interventions

Vaccine (1)
Close School (1)

<< < 1 > >>

Additional Interventions

Social Distance, Close Work

Enabled Interventions

Summary Generic Intervention Vaccinate **Social Distance** Close Work Close School Pharmaceutical Treatment Pharmaceutical Prophylaxis Dynamic Sequestration

No enabled Social Distance Intervention [+ Create New](#)

Intervention Name :

Subpopulation ⁱ

Selection: **Preschool**

Type: Age

Category	Total	Change Percentage
Preschool	6.05% (4507)	100% (4507)
School-age	14.9% (11097)	100% (11097)
Adults	69.9% (52047)	100% (52047)
Seniors	9.04% (6725)	100% (6725)

Compliance ⁱ

☒ % Value ☐ Sweep ⁱ

100%

Duration ⁱ ☒ Default Exp Simulation Days

☒ Value ☐ Sweep ⁱ

200 days

Trigger ⁱ [New](#)

☒ On Day ☐ % Infectious ☐ Every Day

day 30

Name: day 30

Value: 30

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

Enabled Interventions

Summary Generic Intervention Vaccinate Social Distance **Close Work** Close School Pharmaceutical Treatment Pharmaceutical Prophylaxis Dynamic Sequestration

No enabled Close Work Intervention [+ Create New](#)

Intervention Name :

Subpopulation ⁱ

Selection: **Adults**

Type: Age

Category	Total	Change Percentage
Preschool	6.05% (4507)	100% (4507)
School-age	14.9% (11097)	100% (11097)
Adults	69.9% (52047)	100% (52047)
Seniors	9.04% (6725)	100% (6725)

Compliance ⁱ

☒ % Value ☐ Sweep ⁱ

25%

Duration ⁱ ☒ Default Exp Simulation Days

☒ Value ☐ Sweep ⁱ

200 days

Trigger ⁱ [New](#)

☒ On Day ☐ % Infectious ☐ Every Day

Days 30,45,60

Name: Days 30,45,60

Value: 30,45,60

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

Pharmaceuticals

Enabled Interventions

Summary Generic Intervention Vaccinate Social Distance Close Work Close School **Pharmaceutical Treatment** Pharmaceutical Prophylaxis Dynamic Sequestration

No enabled Pharmaceutical Treatment Intervention [+ Create New](#)

Intervention Name:

Subpopulation ⓘ

Selection: **All**

Type: All

Category	Total	Change Percentage
All	100% (74376)	100% (74376)

Trigger ⓘ [New](#)

☐ On Day ☐ Day Range ☐ % Infectious ☐ Every Day

1 percent

Name: 1 percent
Subpopulation: All
% Infectious: 40.0 %
Delay: 10

Regimen ⓘ

Limited Doses ⓘ: Unlimited Doses ☒

2 per day for a week

Treatment Duration: 7
Units Per Day: 2
Transmission Efficacy: 80 %
InfectionEfficacy: 70

Compliance ⓘ

☐ % Value ☐ Sweep ⓘ

60%

Diagnostic Rate ⓘ

☐ % Value ☐ Sweep ⓘ

30%

Rate Of Administration ⓘ

Rate Per Day Unlimited

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

Enabled Interventions

Summary Generic Intervention Vaccinate Social Distance Close Work Close School Pharmaceutical Treatment **Pharmaceutical Prophylaxis** Dynamic Sequestration

No enabled Pharmaceutical Prophylaxis Intervention [+ Create New](#)

Intervention Name:

Subpopulation ⓘ

Selection: **All**

Type: All

Category	Total	Change Percentage
All	100% (74376)	100% (74376)

Trigger ⓘ [New](#)

☐ On Day ☐ % Infectious ☐ Every Day

day 30

Name: day 30
Value: 30

Regimen ⓘ

Limited Doses ⓘ: Unlimited Doses ☒

1DayAntiViral

Treatment Duration: 1
Units Per Day: 1
Transmission Efficacy: 33 %
InfectionEfficacy: 0

Rate Of Administration ⓘ

Rate Per Day Unlimited ☐

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

Diagnosis Probability

Dosage Regimen

Rate constraint

Dynamic Sequestration

Enabled Interventions

Summary Generic Intervention Vaccinate Social Distance Close Work Close School Pharmaceutical Treatment Pharmaceutical Prophylaxis **Dynamic Sequestration**

No enabled Dynamic Sequestration Intervention [+ Create New](#)

Intervention Name :

Subpopulation ⓘ

Selection: Critical worker ⓘ

Type: Critical Worker ⓘ

Category	Total	Change Percentage
Critical worker	100% (3890)	100% (3890)

Trigger ⓘ [New](#)

☐ On Day ☒ % Infectious ☐ Every Day

10%_School_Age_Infected ⓘ

Name: 10%_School_Age_Infected
Subpopulation: School-age
% Infectious: 10.0 %
Delay: 0

Duration ⓘ ☒ Default Exp Simulation Days

☐ Value ☐ Sweep ⓘ

200 days

Compliance ⓘ

☒ % Value ☐ Sweep ⓘ

100%

Group Size ⓘ

☒ Value ☐ Sweep ⓘ

Group Size: 20
No. of Groups :38

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

How many people to sequester?

Generic Intervention

Enabled Interventions

Summary **Generic Intervention** Vaccinate Social Distance Close Work Close School Pharmaceutical Treatment Pharmaceutical Prophylaxis Dynamic Sequestration

No enabled Generic Intervention [+ Create New](#)

Intervention Name :

Subpopulation ⓘ

Selection: **Critical worker** x

Type: Critical Worker

Category	Total	Change Percentage
Critical worker	100% (3890)	100% (3890)

Trigger ⓘ [New](#)

☐ On Day ☒ % Infectious ☐ Every Day

1 percent school-age

Name: 1 percent school-age
Subpopulation: School-age
% Infectious: 1.0 %
Delay: 0

Duration ⓘ ☒ Default Exp Simulation Days

☒ Value ☐ Sweep ⓘ

200 days

Compliance ⓘ

☒ % Value ☐ Sweep ⓘ

80%

Scaling Factor ⓘ

	Home	Work	Shop	Other	School
Infectivity multiplier	0.5	0.5	0	1.0	1.0
Susceptibility multiplier	0.5	0.5	0	1.0	1.0

Rate Of Administration ⓘ

Rate Per Day Unlimited ☒

[Delete](#) [Duplicate](#) [Cancel](#) [Save](#)

Activity specific scaling
of transmission
probability

Additional Workflows

New Trigger

EXPERIMENTS ANALYSIS INITIAL CONDITIONS DISEASE MODELS **TRIGGERS** REGIMENS SCRIPTS ADMIN ABOUT

Triggers

My All Archived + New Trigger

0.5 percent

0.5 percent copy_ks

1 percent

1 percent copy

1 percent school-age

1% Children

11

2 percent

aaaa

day 0

Details Types

☐ On Day

☐ Day Range

☒ % Infectious

Subpopulation ⓘ

Type: All

All

Selection: School-age

Delay ⓘ

☒ Value

☐ Sweep ⓘ

Days 0

Trigger condition

% Infectious ⓘ

☒ % Value

☐ Sweep ⓘ

1%

Delay after trigger condition

1 ... 8

Archive Duplicate Delete Cancel Save

New Regimen

EXPERIMENTS

ANALYSIS

INITIAL CONDITIONS

DISEASE MODELS

TRIGGERS

REGIMENS

SCRIPTS

ADMIN

ABOUT

Regimens

My

All

Archived

+ New Regimen

2 per day for a week

demo regimen

Duplicated_NOWN_Arc...

emuiso

emulate isolation

Regimen_001

Details

Name ⓘ
2 per day for a week

Modified On ⓘ : Oct 06 2017, 10:38

Owner ⓘ : vsriniv

Description ⓘ

Treatment Duration ⓘ
7

Unit Per Day ⓘ
2

Transmission Efficacy ⓘ
80

Infection Efficacy ⓘ
70

1

Archive

Duplicate

Delete

Cancel

Save

Effect of drug on
the infectious and
the susceptible

New Analysis

EXPERIMENTS ANALYSIS INITIAL CONDITIONS DISEASE MODELS TRIGGERS REGIMENS SCRIPTS ADMIN ABOUT

Back New Epi Analysis

Analysis Details Cancel Preview

Name (i): New Epi Analysis

Description (i):

Script (i): Select Post Processing Script

Select Cells My Selection

Experiments

My All Search experiment

[8034] Montgomery County - Influenza ...
Complete Oct 04 2017 27 Cells vscriv

Total Cell(s) : 27 Select: All | None

☐ Cell 95689 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 30 View More	☐ Cell 95690 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 30 View More	☐ Cell 95691 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 30 View More
☐ Cell 95692 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 30 Trigger Value : 45 View More	☐ Cell 95693 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 60 Trigger Value : 45 View More	☐ Cell 95694 Complete HASWELL Close Schools Trigger Value : 30 Extra Vaccine Campaign Compliance : 90 Trigger Value : 45 View More
☐ Cell 95695 Complete HASWELL Close Schools Trigger Value : 30	☐ Cell 95696 Complete HASWELL Close Schools Trigger Value : 30	☐ Cell 95697 Complete HASWELL Close Schools Trigger Value : 30

<< < 1 > >>

Cancel Preview

Name of analysis script

Experiment

Can select cells across experiments!

New Scripts

Scripts

MyAllArchived

+ New Script

Empty Script

EpiFast Preprocessing S...

Generate Map

SIBEL API test of PSL ver...

test1_Analysis_PSL

Details

Script Name ⓘ

Generate Map

Script File Name ⓘ

gen_map.py

Script Type ⓘ

☐ Experiment ☒ Analysis

Description ⓘ

Modified On ⓘ

: Oct 06 2017, 10:39

Owner ⓘ

: vsriniv

⏪⏩1⏪⏩

Archive

Delete

Cancel

Save

Scripts can be used to preprocess or analyze!

Questions?

https://sibel.vbi.vt.edu/sibel/SIBEL_User_Manual.pdf