



OPERATION OUTBREAK

Enhanced Simulation Guidebook

Table of Contents

SECTION 01	Welcome to Operation Outbreak	03
SECTION 02	Pre-Simulation Lead Facilitator Checklist	04
SECTION 03	Family Units (General Population)	05
	Getting Started	
	Starting Tokens	
	How to Survive	
	How to Earn Tokens	
	If Your Avatar Dies (“Simulation Over”)	
SECTION 04	Work Units: General Guidelines	06
	Getting Started	
	Starting Tokens	
	How to Survive	
	If Your Avatar Dies (“Simulation Over”)	
SECTION 05	Work Units: Guidelines by Role	07
	Government Officials	
	Healthcare Workers	
	Biomedical Researchers	
	Public Health Officials	
	Bankers	
	Store Clerks	
	Reporters	
SECTION 06	Reflection Station	10

Welcome to Operation Outbreak



The Participant Code of Conduct

01

Safety & Respect

Follow the Lead Facilitator's instructions. No bullying, harassment, or unsafe contact.

02

It's a Simulation

Play your role realistically. If you're infected, act accordingly.

03

Use Tools Properly

Use the app as intended. Bring a fully charged phone.

Enhanced Simulation Overview

THE GOAL

Keep society functioning while managing an outbreak.

Players keep avatars healthy through daily tasks (eating, medicating, etc.) and outbreak interventions (masks, tests, vaccines).

STRUCTURE

Participants are divided into:



Family Units

1-4 participants each;
General Population



Work Units

Role-specific groups

IMPORTANT TERMS AND RESOURCES

Operation Outbreak Mobile App

Avatar Health Shows your health status, including how protected you are from the pathogen.

Scan Tool Scans QR codes for vaccines, masks, tests, food, and medicine.

Usernames Anonymous IDs protect your privacy (e.g., Alpha Boston).

Support Tools

Outbreak Creator The Lead Facilitator can use this to set simulation details (i.e., population size, pathogen, duration) and create a Join Code.

Outbreak Lookout Participants in some Work Units can use this to access real-time simulation data (best viewed on a laptop).

Outbreak Visualizer All participants can view and learn from the post-simulation outcome analysis.

Pre-Simulation Lead Facilitator Checklist



Prepare

01

- Contact the Operation Outbreak team at welcome@operationoutbreak.org to plan your simulation (optional but highly recommended).
- Secure Wi-Fi or cellular data access.
- Ensure every participant has access to a device with the Operation Outbreak app.
- Create a simulation and Join Code in Outbreak Creator.
- Run a mobile app test with 5–10 participants.
- Train Station Supervisors on Outbreak Lookout.

Provide

02

- Simulation Summary (with Join Code)
- Guidelines for Family Units and Work Units
- Tokens or chips
- Quiz key (for Bankers)
- Optional props and outfits for roles (e.g., ties, lab coats, personal protective equipment)

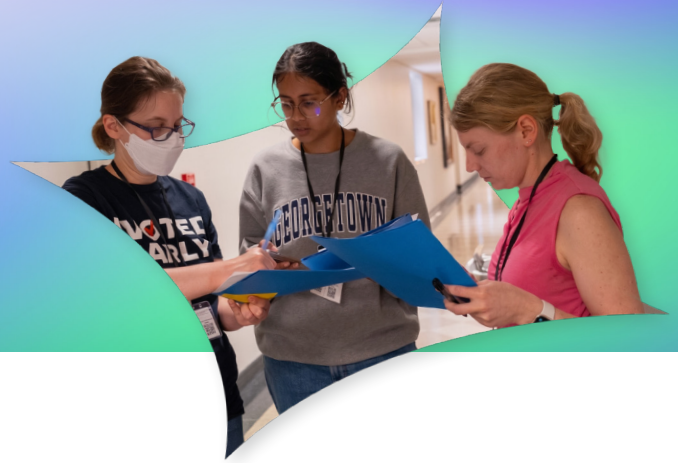
Plan

03

- Assign at least one Station Supervisor per Work Unit and Reflection Station.
- Assign Family Units (1–4 people). Outbreak Creator will provide guidance based on the population size.
- Distribute tokens based on Economic Level. Outbreak Creator will provide guidance based on the population size.
- Confirm roles, Facilitators, and Economic Levels.

Family Units

(General Population)



Getting Started

- Each participant joins a Family Unit of 1–4 people.
- Family Units are assigned Economic Levels (1–3), which determine the number of starting tokens.
- Family Units move together in groups to quiz areas.

Starting Tokens

- Each Family Unit is assigned a number of tokens (money).
 - The amount depends on their assigned Economic Level.

How to Survive



Food

Buy food at the Store when you're hungry (~every 30 minutes). Staying nourished reduces infection risk.



Masks & Tests

Buy masks and diagnostic tests at the Store.



Healthcare Visits

Go to Healthcare Workers for diagnostic tests, treatments, and prescriptions, which will allow you to buy medicine at the Store.



Vaccination

Consider getting vaccinated when available.

How to Earn Tokens

- As a Family Unit, complete quizzes posted around the venue.
- Submit quizzes to the Bank for grading.
- Rewards:
 - 25–74% correct = 1 token
 - 75–100% correct = 2 tokens

If Your Avatar Dies (“Simulation Over”)

- Notify your Family Unit.
- Give your remaining tokens to your Family Unit (or Bank if alone).
- Report your avatar's death to Biomedical Researchers.
- Go to the Reflection Station.

Work Units

General Guidelines



Getting Started

- Non-Family Unit participants are assigned to one of seven Work Units:
 - Government Officials
 - Healthcare Workers
 - Biomedical Researchers
 - Public Health Officials
 - Bankers
 - Store Clerks
 - Reporters

Starting Tokens

- Work Units receive tokens that should cover all expenses needed.

How to Survive

- Follow the same survival guidance as **Family Units**: Eat, protect, test, treat, and vaccinate.

If Your Avatar Dies (“Simulation Over”)

- Notify members of your Work Unit.
- Give your remaining tokens to the Bank.
- Report your avatar’s death to the Biomedical Researchers.
- Go to the Reflection Station.

Work Units

Guidelines by Role



GOVERNMENT OFFICIALS

Goal:

Protect health and maintain order, keeping the infection rate below 50%.

Tasks:

- Confirm pathogen identity with the Biomedical Researchers and Lead Facilitator.
- Make decisions around vaccine production and distribution.
- Communicate decisions to all groups (e.g., press conferences with Reporters).
- Work with Public Health Officials to enforce quarantines.
- Approve funding in Outbreak Lookout for Healthcare Workers, Public Health Officials, and Biomedical Researchers.

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

Costs:

- \$1,000,000/minute baseline work per unit (Healthcare Workers, Public Health Officials, and Biomedical Researchers).
- \$75,000 to hire and support each additional Work Unit worker, if needed. (The new hire will distribute their tokens to their Family Unit and then be given the number of tokens equal to the starting number for their Work Unit).
- \$500,000 per 20 vaccines.

HEALTHCARE WORKERS

Goal:

Diagnose, treat, and track cases of infection.

Tasks:

- Request funding in Outbreak Lookout. **The system locks if funds run out.**
- Test suspected cases and log results.
- Record check-ins and symptoms via Outbreak Lookout.
- Issue prescriptions (Rx) for medicine.

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Direct "Simulation Over" participants to the Biomedical Researchers.
- Coordinate with Biomedical Researchers, Public Health Officials, and Government Officials.
- Work with the Government Officials on vaccine distribution.

Work Units

Guidelines by Role



BIOMEDICAL RESEARCHERS

Goal:

Identify the pathogen and analyze outbreak data.

Tasks:

- Request funding in Outbreak Lookout.
The system locks if funds run out.
- Analyze Healthcare Worker data (e.g., cases, symptoms, deaths).
- Record deaths ("Simulation Over") in Outbreak Lookout.

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Research symptoms to identify the pathogen.
- Send pathogen identity to the Government Officials.
The Lead Facilitator will confirm accuracy.
- Support vaccine development and distribution plans.

PUBLIC HEALTH OFFICIALS

Goal:

Limit the spread of disease through tracing and quarantines.

Tasks:

- Request funding in Outbreak Lookout.
The system locks if funds run out.
- Record tracing and quarantine measures in Outbreak Lookout.
- Notify Government Officials, Healthcare Workers, Reporters, and the Family Units of new measures.

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Contact-trace infected individuals.
- Decide whether contacts should be tested or quarantined.
- Enforce quarantine in designated areas.
- Facilitate food delivery to quarantined areas.

Work Units

Specific Guidelines



BANKERS

Goal:

Manage the token economy.

Tasks:

- Grade quizzes with the keys provided in Outbreak Creator.
- Award tokens:
 - 25–74% correct = 1 token
 - 75–100% correct = 2 tokens

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Ensure only one quiz-taker per Family Unit.
- Collect Store funds to keep the economy circulating.

STORE CLERKS

Goal:

Sell essential items for survival.

Tasks:

- Set and display prices (adjust if needed).
- Use QR codes to sell:
 - Food
 - Diagnostic tests
 - Masks
 - Medicine (only with Rx)

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Deposit funds into the Bank every 30 minutes.
- Decide whether to run one or two Stores based on staff.

REPORTERS

Goal:

Gather and share accurate information.

Tasks:

- Interview Family Units and Work Units.
- Share verified updates approximately every 20 minutes.
- Fact-check before making announcements.

Simulation Over:

If your avatar dies, delegate a member of the General Population to take your place. Then report your death to the Biomedical Researchers and go to the Reflection Station.

- Organize press conferences with Work Units (Government Officials, Biomedical Researchers, Healthcare Workers, and Public Health Officials).
- Announcements should be detailed and include the what, when, where, and who.

Reflection Station



Station Setup

- Assign one Facilitator per station.
- Provide tables, pens, markers, and a display area.

Before Starting

- Report your death to the Biomedical Researchers.
- Return leftover tokens to your Family Unit, Work Unit, or Bank if alone.

Part 1: Social Media Wall

- Create a short (< 50 words) “post” about your experience and turn it in for Facilitator approval.
- Display the post at your assigned location.

Part 2: Debrief Questions

- Where and when did you get infected?
- Did you test? Report? Mask? Medicate? Vaccinate?
- Did the vaccine work? Do you have any thoughts on why or why not?
- How do you think you were infected?
- What would you do differently?
- What did you learn about outbreak response?

Part 3: Comments

- What did you like most?
- What could be improved?
- What are your overall thoughts on the simulation experience?

A SPIN OUT OF

