

# ICEBERG SYSTEMS THINKING FACILITATION TOOLKIT

## Module Purpose

This module is designed to lead a consortium or network through applying the Iceberg Systems Thinking tool to explore different levels of causes of complex public health problems.

## Desired Outcome

Groups participating in this module will have a better understanding of the causes of their identified public health challenge, recognized points of leverage for interventions, and opportunities for engaging additional stakeholders.

## Before Beginning

- Review the facilitators slide deck and script.
- Ensure participants represent diverse perspectives.
- Use this guide to develop a facilitation plan for the meeting.
- Identify a primary outcome of interest from your Rural Communities Opioid Response Program project that you will use for the iceberg activity. The outcome should be a population-level indicator and should be measurable. Some examples of population-level outcomes include
  - Opioid overdose death rate
  - Number of babies born with neonatal abstinence syndrome
  - Number of people with opioid use disorder

## Table of Contents

1. [Sample Facilitators Agenda](#)
2. Facilitators Slide Deck and Script (saved separately)
3. [Iceberg Activity Guide](#) (virtual and in-person facilitation)
4. Iceberg Template (saved separately)
5. [Facilitation Tips and Tricks](#)
6. [Additional Recommended Resources](#)

# SAMPLE FACILITATORS AGENDA

## Iceberg

### Learning objectives:

- Describe types and levels of leverage affecting your system
- Consider behaviors, structures and mindsets that shape your focal outcome

Note: These are suggested times and may be tailored to meet your group dynamics. Assign a notetaker to capture group input.

Time	Activity	Notes
15 minutes	<b>Welcome and Introduction</b> Welcome Ice Breaker	<a href="#">Slides 1-2</a>
5 minutes	<b>Systems Thinking and the Iceberg Metaphor</b>	<a href="#">Slides 3-7</a>  Basic definitions in systems thinking Introduction to the iceberg metaphor
5 minutes	<b>Iceberg Example</b>	<a href="#">Slides 8-10</a>  Levels of leverage and interventions Iceberg activity and example Note about stigma
5 minutes	<b>Variable Naming</b>	<a href="#">Slides 11-19</a>
10 minutes	<b>Variable Naming Activity</b>	<a href="#">Slides 17-19</a>  How to improve some problematic variables
	<b>Break</b>	
40 minutes	<b>Iceberg Activity</b>	<a href="#">Slides 22-23</a>  See Iceberg Activity Guide on page 3  Build a set of system-level causes and causes-of-causes
30 minutes	<b>Group Debrief</b>	<a href="#">Slide 24-25</a>  <i>*If you have breakout groups allow each group to share their iceberg story.</i>  Notetaker captures learnings and next steps.  Whole-group discussion of possible interventions, who is “handling” them, stakeholders in each one as stakeholders in the outcome
10 mins	<b>Next Steps and Close</b>	

# SYSTEMS THINKING ICEBERG ACTIVITY GUIDE

## Virtual Facilitation

EQUIPMENT	MATERIALS
<ol style="list-style-type: none"><li>1. Laptop or desktop computer with video and audio capabilities</li><li>2. Videoconferencing and screensharing capability</li></ol>	<ol style="list-style-type: none"><li>1. Facilitator's guide</li><li>2. PowerPoint iceberg template</li></ol>

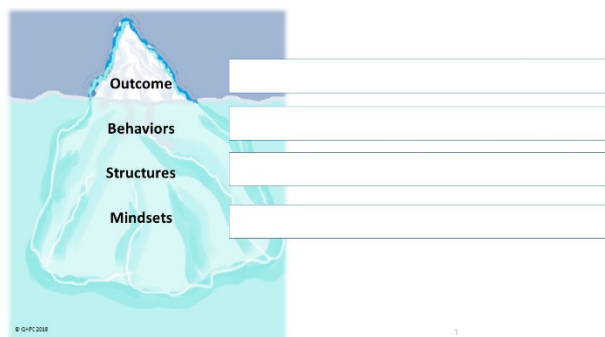
### Facilitation notes:

Most variables need to be nondirectional. Example: instead of lack of transportation, access to transportation. Policies may be binary (yes there is one/no there is not one).

You may consider dividing large groups into breakout rooms if you have additional facilitators.

**Time:** 40 minutes

1. Set the Iceberg template image as a background in Jamboard. Please see [Jamboard Instructions](#) for more information on how to add a background image.



2. Ask the group to identify the **outcome** they would like to put at the top of their iceberg for the activity. (ex. overdose deaths, infants born with neonatal abstinence syndrome, etc.). Type their outcome on the template.
3. Ask the group to identify **behaviors** that lead to those outcomes: Who does or does not do what? Participants use one sticky note per behavior. (Facilitation note: prompt participants to think about what particular people or groups, such as pharmacist or parents, are doing that impact the outcome)
4. Have the group pick one behavior to drill down on; **bold** that behavior and ask the group to identify **structures** that force, enable, or prevent the identified behavior. Participants create one sticky note for each structure identified.
5. Have the group pick one structure to drill down on; **bold** that structure and ask the group what **mindsets** support those structures (knowledge, beliefs, attitudes, norms). Participants create one sticky note for each.
6. Ask a participant to tell a story from bottom to top: When so-and-so have X mindset, they are more likely to create x structure. ***When x structure is in place, then people (or particular sub-group) are more/less likely to do y behavior. Increasing levels of y behavior in the population result in higher (or lower) levels of z (the outcome).***
7. At what level(s) and how is our project trying to intervene?
  - a. If time allows, ask the group to identify a possible intervention at each level.
8. Lead the team debrief: What did you learn, and what does it mean for your project going forward? Are there leverage points you may be missing in your current efforts? Steps you should do in a different order? Undesired consequences to keep in mind?
9. If you had breakout rooms, return to the main room for a whole room share and debrief.



# SYSTEMS THINKING ICEBERG ACTIVITY GUIDE

## In-Person Facilitation

### Materials

Flip-chart with a sketch of the iceberg with levels labeled; sticky notes; pens, pencils, or markers.

Facilitation notes: Most variables need to be nondirectional—example: instead of lack of transportation, access to transportation. Policies may be binary (yes there is one/no there is not one).

You may consider dividing large groups into breakouts if you have additional facilitators.

**Time:** 40 minutes

1. Ask the group to identify the **outcome** they would like to put at the top of their iceberg for the activity (e.g., overdose deaths, infants born with neonatal abstinence syndrome, etc.). Write their outcome on the flipchart. You may pre-label on the flipchart if you have an established outcome for your project.
2. Ask the participants to write the **behaviors** that lead to those outcomes on a sticky note. One behavior per sticky note: Who does or does not do what? (Facilitation note: prompt participants to think about what particular people or groups, such as pharmacist or parents, are doing that impact the outcome). Participants take turns sharing the behaviors that they identified and place the sticky notes on the iceberg flip chart.
3. Have the group pick one behavior to drill down on; and ask the participants to write **structures** that force, enable, or prevent the identified behavior. One structure per sticky note. Participants take turns sharing the structures that they brainstormed and place the sticky notes on the iceberg flip chart.
4. Have the group pick one structure to drill down on; and ask the participants to write **mindsets** support those structures (knowledge, beliefs, attitudes, norms). One mindset per sticky note. Participants take turns sharing the mindset that they brainstormed and place the sticky notes on the iceberg flip chart.
5. Ask participant to tell a story from bottom to top: When so-and-so have X mindset, they are more likely to create X structure. *When X structure is in place, then people (or*

*particular subgroup) are more or less likely to do Y behavior. Increasing levels of Y behavior in the population result in higher (or lower) levels of Z (the outcome).*

6. At what level(s) and how is your project trying to intervene?

If time, ask the group to identify a possible intervention at each level.

7. Lead the team debrief: What did you learn, and what does it mean for your project going forward? Are there leverage points you may be missing in your current efforts? Steps you should do in a different order? Undesired consequences to keep in mind?
8. If you had breakout groups, reconvene as a whole room to share and debrief.

# FACILITATION TIPS & TRICKS

## Iceberg Activity

### 1) Take your time going through the levels of the iceberg

- The iceberg activity can sometimes appear to be deceptively simple – if you get rushed, you can end up with variables that do not work, variables that are placed on the wrong level (e.g., a mindset that is misidentified as a behavior), or variables that are not measurable.
- Take the time to dialogue the variables that you place at each level and discuss your outcome at the top.
- Because variables can so easily trip people up in this activity, it is worth spending some time on just that first.

### 2) Choose the ultimate public health outcomes you want to influence

- It will help in completing this activity to place a public health outcome at the top. You can keep your “eyes on the prize” if your intervention is trying to increase access to treatment, still choose your outcome variable as number of people with opioid use disorder or number of opioid use disorder deaths or neonatal abstinence syndrome births, for example.

### 3) Look for causes, and causes of causes

- The levels of the iceberg are there to help think about different categories of things going on in the system. Try to reach consensus on where each variable belongs. At the same time, do not get too hung up if folks see something differently. Remember, a given factor may have multiple influences in the system, both up and down the iceberg.

### 4) Variables are quantities that can change over time

- Be sure variables are quantities.

- Be sure variables are not comparative (not more than or less than, high or low, increasing or decreasing).

#### **5) Include a variety of perspectives in the activity**

- This is an ideal activity for hearing from a variety of perspectives. Try to get as much diversity in organizational role representation (e.g., CEOs, middle management, clinical staff, etc.) and sector representation (e.g., health care, public health, community-based organizations, etc.) as possible.

## **General Facilitation Advice**

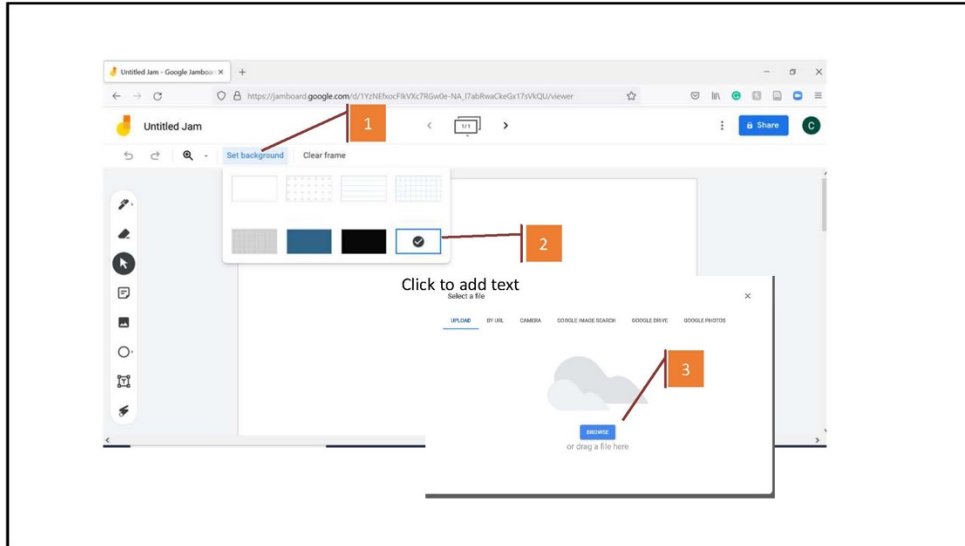
#### **1) For debrief sessions make sure to have a couple of planned questions to get people talking.**

- It may help to identify one or two people you know you can call on to get the conversation started, if needed.

#### **2) Incorporate other technology components to accommodate different learning styles if they add value to the activity.**

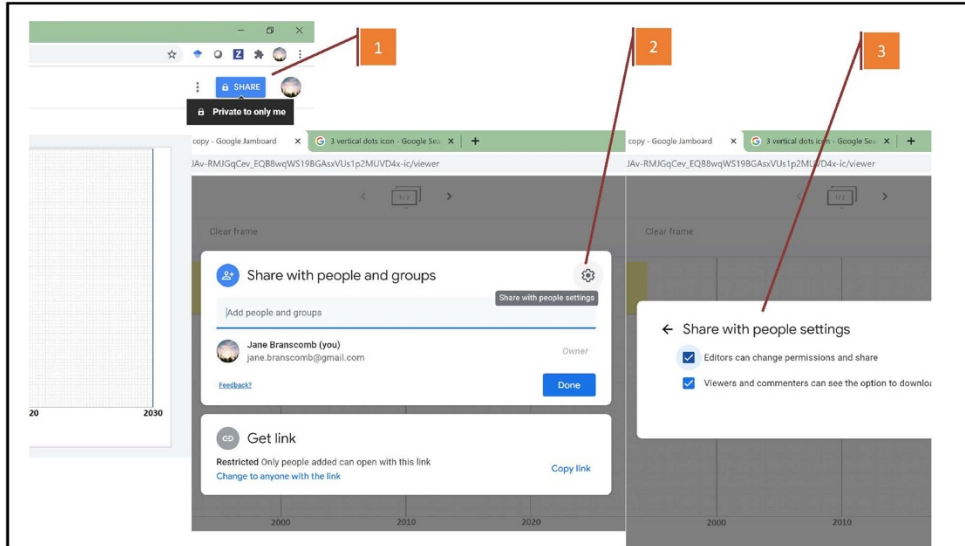
- For example, polls for knowledge checks, Google Jamboard for facilitating group conversations through virtual post-its, or word clouds to gauge people's feelings.
- Balance the use of technology with the information you are trying to convey. Using too many methods can become distracting. When incorporating technology, always think about how does this add value?





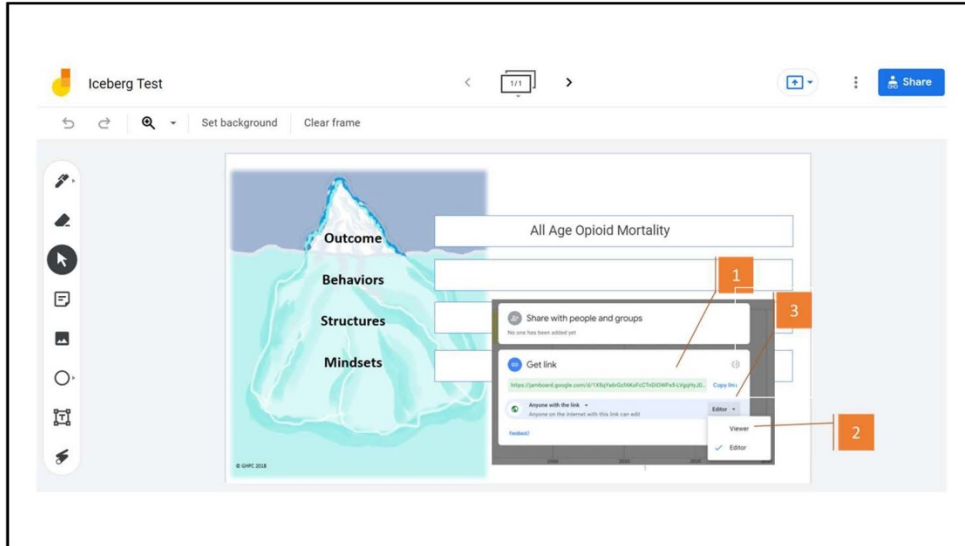
**A. Set Jamboard background:**

1. Click set background
2. Select set image
3. Upload the activity template image



**B. Set permissions on your copy to enable anyone to open and edit.**

1. Click the blue Share button.
2. Click the gear icon, Share with people settings.
3. Check the box so Editors can change permissions and share; then click the left arrow.

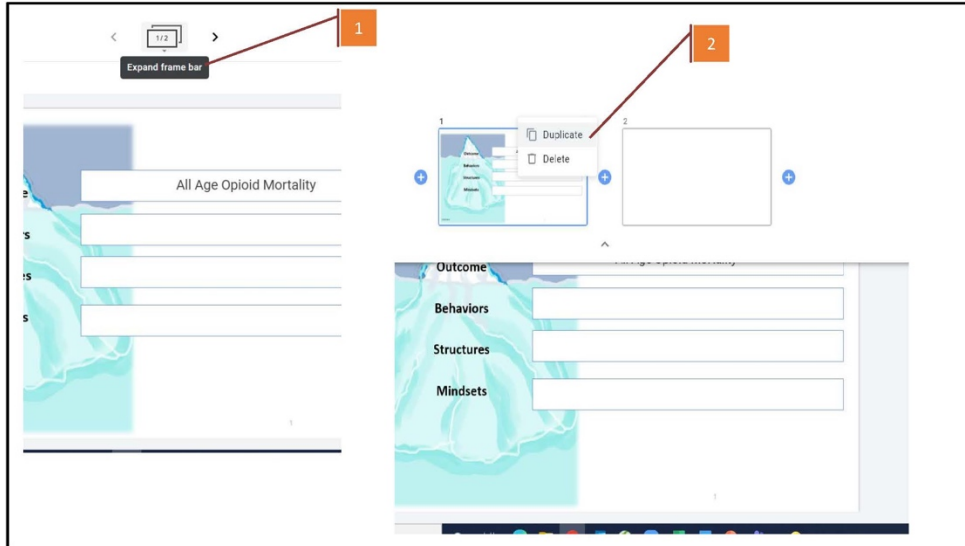


### **C. Give all users permission to edit the Jamboard**

1. Click on Get link

2. Change permission to: Anyone with the link and check Editor

3. Click to Copy link. This is the link you will share with team members for the activity. *Note: You can share via email ahead of the session so that your partners can access and play around in JamBoard and find their page, or share in real time (i.e., via Chat) during your meeting and orient them to the app then.*



**D. Make a worksheet for each member of your team.**

1. Click the down-arrow under the page icon in the middle of the app header to Expand frame bar.

2. Click the vertical ellipsis at top right of a sheet you want to duplicate and click Duplicate. Make as many page copies as you need.

Instruct participants to use the left and right arrows to toggle to the sheet with their name.

# ADDITIONAL RESOURCES

## Quick Picks

- [Dancing With Systems](#)
- [System Thinking Fact Sheet](#)

## Deeper Dive

- [Leverage Points: Places to Intervene in a System](#)

For more information on this resource, contact the Community Health Systems Development Team at GHPC at [chssteam@gsu.edu](mailto:chssteam@gsu.edu).