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| **Name:** |  |

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|  | Contact Tracing  **Student Data Collection Sheet** |

Think About It! Write your answers below:

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| Understanding Contact Tracing | 1. What experiences have you had with **contact tracing** in your community? |
| 1. What difficulties do you think contact tracers might have when attempting to contact people after a disease diagnosis? |
| 1. Why might quarantining after a disease exposure be difficult for some people? |

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| Contact Tracing and CDC | 1. What are some reasons why **contact tracing** is more difficult in remote areas? |
| 1. If contact tracers miss one **close contact**, what are possible consequences? |
| 1. What skills do you think contact tracers need most? |

In this step, you share your information. Sharing the information you collect is key. Click the links below to share:

https://observer.globe.gov/do-globe-observer/mosquito-habitats

http://www.citizenscience.us/imp/collectionform.php

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| Citizen Science | 1. During the 2014-16 Ebola outbreak, how did CDC help with **contact tracing**? |
| 1. Why do you think the first 2-3 days after infection is the critical window for **contact tracing** to occur? |
| 1. How are schools in the United States using **contact tracing** to keep students safe? |

Conduct a Disease Transmission Experiment: Data Collection

Record the results from your contact tracing experiments in the table below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Person 1 | | Person 2 | | Person 3 | | Person 4 | | Person 5 | | Person 6 | |
| Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  |
| Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  |
| Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  |
| + or - |  | + or - |  | + or - |  | + or - |  | + or - |  | + or - |  |
| Person 7 | | Person 8 | | Person 9 | | Person 10 | | Person 11 | | Person 12 | |
| Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  | Round 1 |  |
| Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  | Round 2 |  |
| Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  | Round 3 |  |
| + or - |  | + or - |  | + or - |  | + or - |  | + or - |  | + or - |  |

Use the results of your activity to identify your initial index cases. Due to the limitations of this experiment, you will not be able to find a single initial index case, but you should be able to narrow it down to 2 individuals.

• Stuck? Cut out the 12 person cards and move them around to help you better visualize it.

• Start by writing your positive pairs in the bottom row and work your way up to the top.

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|  |  |  |  |  | **Index Case** | | | | | | |  |  |  |  |
|  |  |  |  |  | **/** |  |  |  |  |  | **\** |  |  |  |  |
| Round 1 Positives |  |  |  | | |  |  |  |  |  |  | | |  |  |
|  |  |  | **/** |  | **\** |  |  |  |  |  | **/** |  | **\** |  |  |
| Round 2 Positives |  | | |  |  | | |  |  | | |  |  | | |
|  | **/** |  | **\** |  | **/** |  | **\** |  | **/** |  | **\** |  | **/** |  | **\** |
| Round 3 Positives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Plan a Contact Tracing Interview

Based on David’s background information, what questions do you have for him?

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What specific recommendations do you have for David based on his background information?

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Reflections

**Now that you have completed this investigation, think about what you learned from your research and experiments. Answer the questions below.**

1. What is the main goal of **contact tracing**?

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1. How does **contact tracing** slow the spread of a disease?

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1. In your two **contact tracing** activities, what did you find challenging? What were some key understandings that you gained?

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1. Why is **contact tracing** often more important for **asymptomatic** cases of a disease compared to **symptomatic** cases?

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1. Which do you think is more important: an individual’s right to withhold their private health information (individualism) or the public health department’s ability to monitor disease in a community (collectivism)?

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1. Molecular evidence from DNA, RNA, or proteins is used to study outbreaks. How could sequences from different strains of a virus help scientists trace the path of an infection?

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