Systematic Observation of Mask Adherence and Distancing (SOMAD)

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Controlling the COVID-19 Pandemic

- Adherence to guidelines for face coverings and physical distancing are key strategies to stop the spread of the COVID-19 virus, which is primarily spread through air droplets from infected individuals
- Compliance with these guidelines has been suboptimal and COVID-19 is still not under control in the United States
- Identifying the settings and characteristics of adherence and non-adherence may be useful to guide further public health response to the pandemic

Partnering with organizations who can use this information

- The most important part of any public health study is determining whether the effort will be useful
- We recommend you check with the local health department or other organizations to see if they can use the information and to find out if they prefer getting the information from specific communities or locations
- We understand that not all localities are aggressively pursuing control measures
- The information may then be useful at a national level and may explain differences in transmission between communities

Systematic Direct Observation: Background

- A method to observe behaviors from a distance
- There is no direct interaction with the persons being observed
- The data obtained are more credible than self-report, and are considered objective
- Direct observation has generally been found to be reliable, meaning two people looking at the same thing at the same time report the same findings

Human Subjects Approval for Direct Observation

- Observing people in public settings is generally approved as a valid research method
- Because there is no interaction with human subjects, these studies are generally considered exempt
- This study has been approved and is considered exempt by the RAND IRB, which oversees this study

Usefulness of the Adherence Information

- Health departments, elected officials, and multiple organizations that care about health may be interested in data about adherence to guidelines intended to curtail the spread of COVID-19
- Documenting the settings where people interact and may be exposed may guide future behaviors and additional mitigation strategies
- Documenting the characteristics of adherers and non-adherers may help focus educational/informational interventions

Systematic Observation of Mask Adherence and Distancing (SOMAD)

Building on methods of direct observation, SOMAD documents the characteristics of persons in public spaces and their adherence to guidelines for face coverings and physical distancing

An observer will select a setting and observe that setting for at least one hour on a weekday and a weekend

If the observation is repeated monthly, on the same days and times, we will be able to document trends in adherence

Selection of Settings and Safety

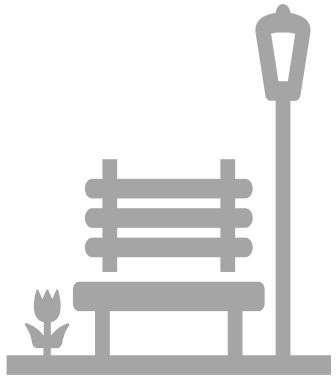
We are only selecting outdoor public spaces for the safety of the data collectors

All data collectors must wear a face mask and keep at least a 6-foot distance from other people in the setting

Conducting the observations from the inside of a private automobile is encouraged for safety, but the person must have a clear, unobstructed view of the space where the coding is done.

Settings

Commercial streets– Streets and sidewalks where people are likely to cross paths and have brief contact with others, adherence to mask guidelines may be important. People are often required to wear masks before entering retail outlets.



Parks, playgrounds and playstreets- Outdoor spaces where people recreate. Even though distancing may be possible, infected air droplets are thought to linger in the air, so mask wearing may also be protective.

Other Settings, including protests, beaches, etc. may be of interest in local areas, but safety of data collectors must be considered as a priority.

Two types of settings

A space where people spend time (e.g. park, playground)

A path, sidewalk, or street where people pass by.

Documenting users in spaces where people tend to spend time

- The space should first be mapped and divided into target areas
- People should be systematically counted in each target area, from left to right. Observers should count the target areas in the same order during subsequent observations
- Only count users in the area once and do not count people more than once, even if they move to different target areas
- The method generally follows the SOPARC protocol, but focuses more on characteristics of individuals, rather than the use of the space
- Only document spaces, if you have experience with SOPARC
- Otherwise just code paths and sidewalks

Documenting those on paths

- Select a point or visible stretch along the path
- You will then enter data on everyone who passes by that point, from any direction
- You should plan to observe the spot for at least one hour on a weekday and a weekend day
- Schedule subsequent observations at the same time and day in different weeks or months to capture trends over time

Must have access to smart phone or tablet

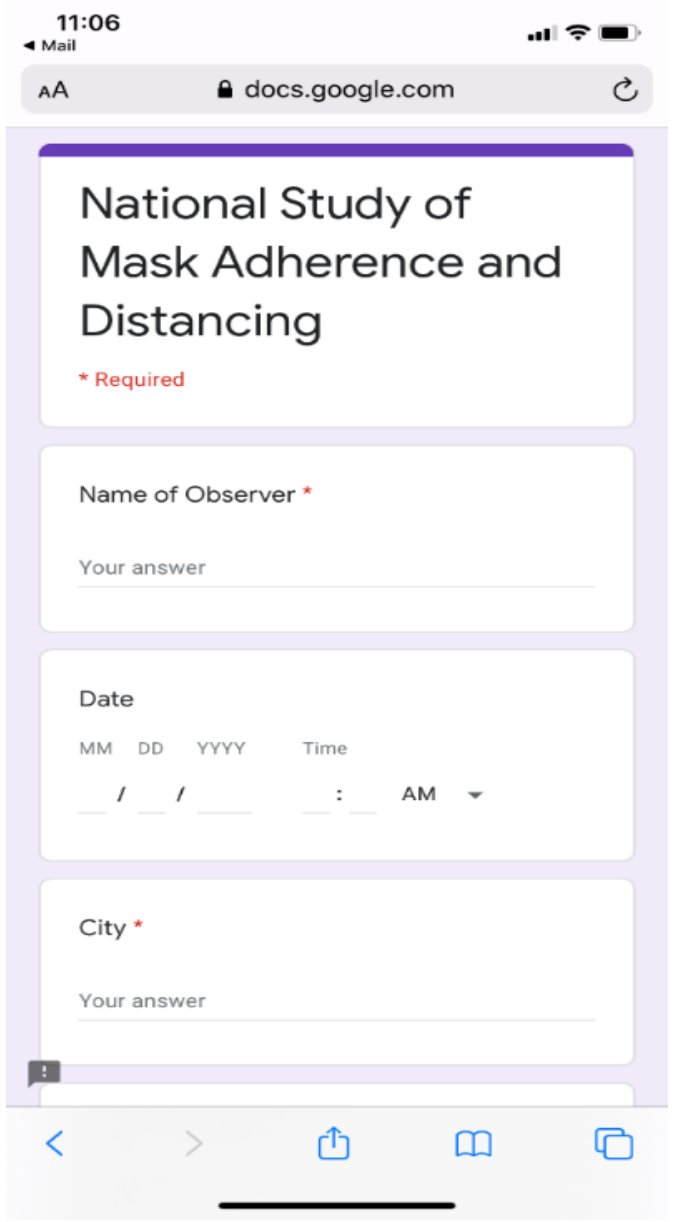
- Works with iphone or android
- However, we have come across some glitches
- Test it out before you go to the field

Attestation for Data Collectors

- Participation in data collection is a volunteer activity
- There is no compensation
- All work is at your own risk
- Data collectors must assure that they will wear face coverings and physically distance from others for their own safety.
- Data collectors must sign a statement acknowledging this before collecting data

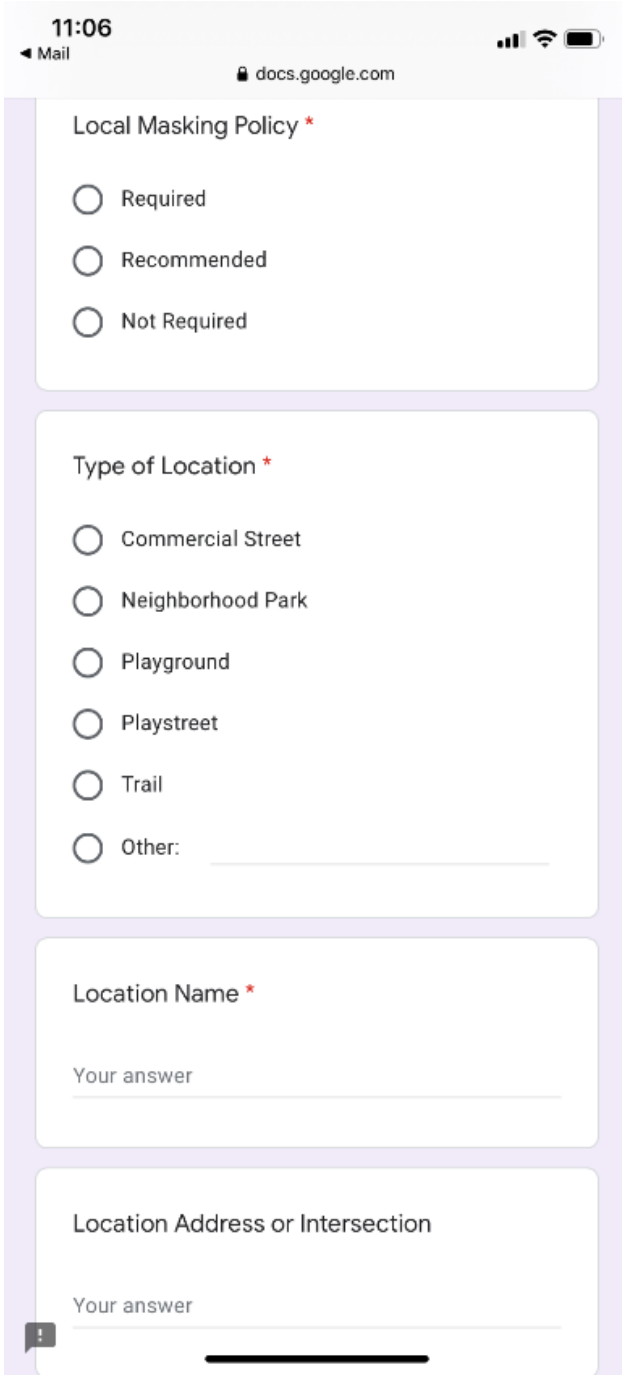
Data collection

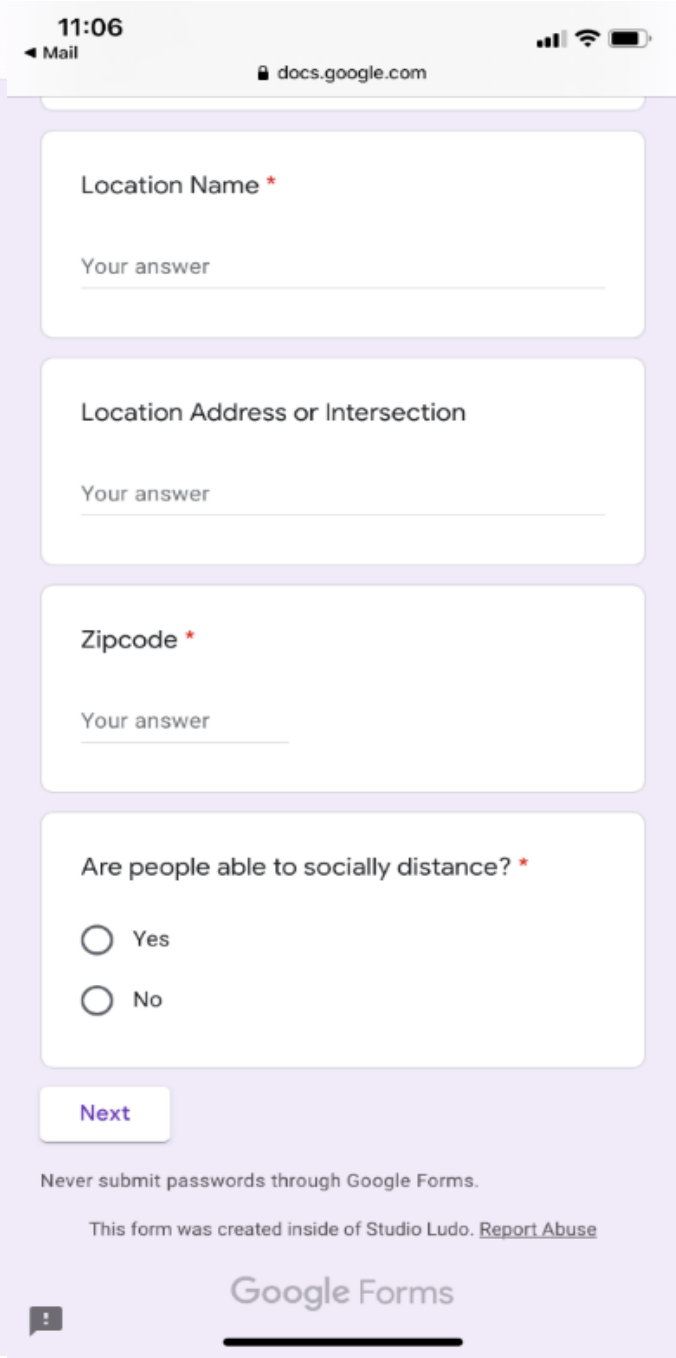
- Tap on the link to Google forms
- Record your name and the information about the setting
- Date, time and City



Setting variables

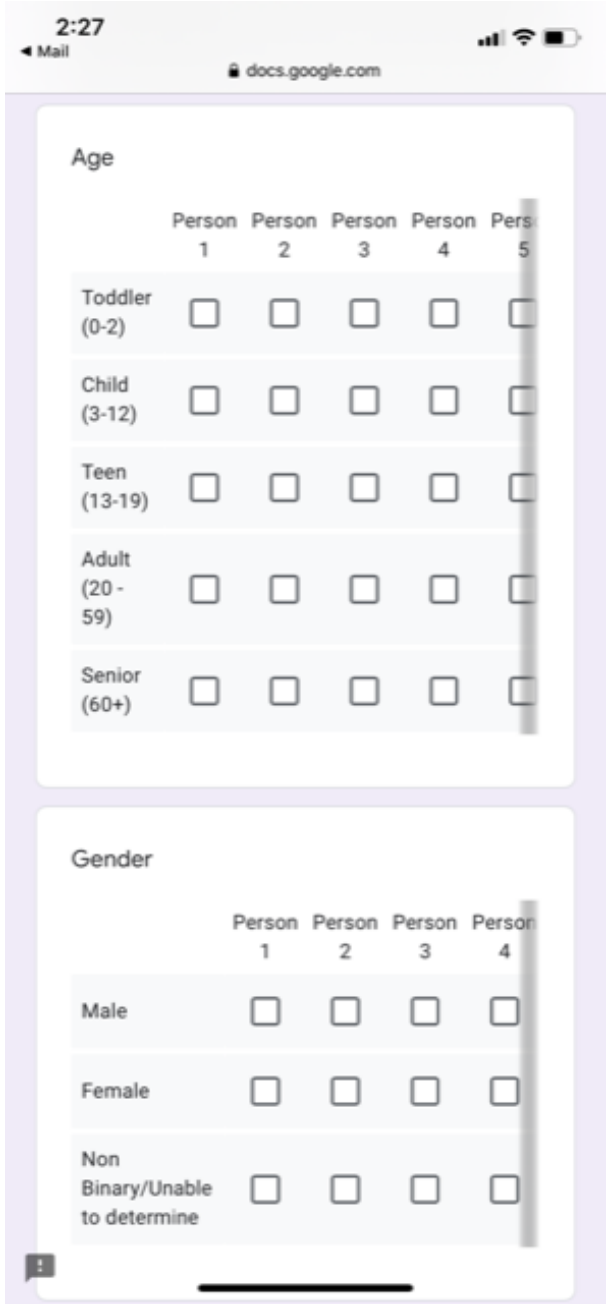
- Add information about the local masking policy
- The type of location
- The location name, (or other indicator if there is no official name)
- Address or intersection
- Zip code
- Can people physically distance?
  - Is there enough room for people to stay 6 ft apart?





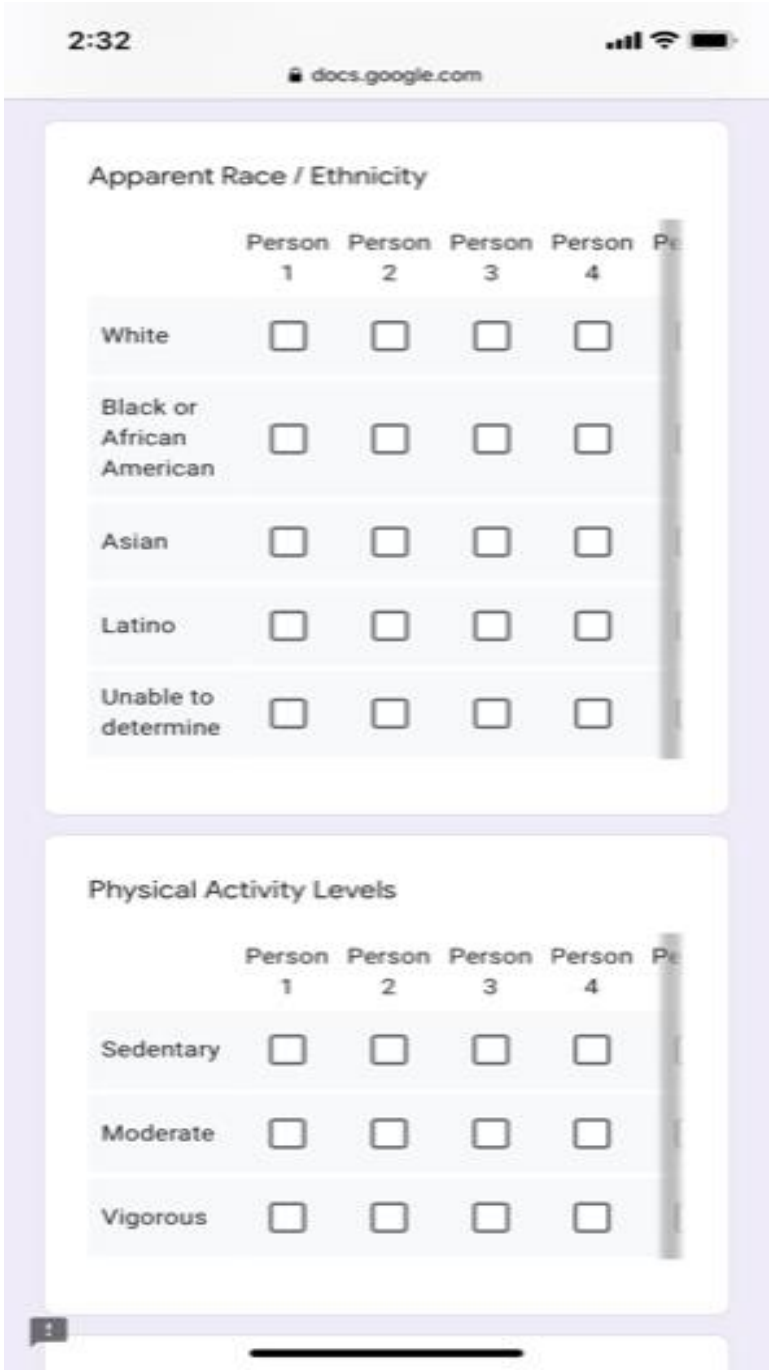
Individual characteristics

- The form scrolls down and scrolls across
- You record each person top to bottom
- You can record up to 30 people going across
- If you submit before adding 30 people, you will have to start with the setting data again
- Recording starts with age group and gender



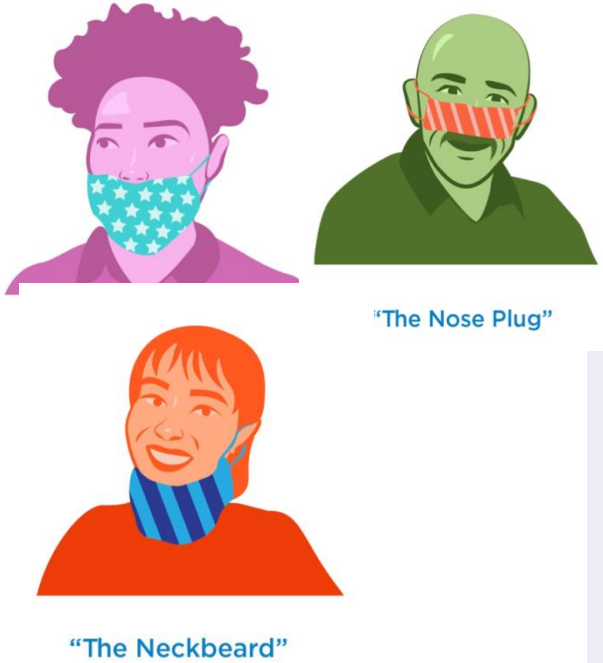
Apparent race/ethnicity and physical activity level

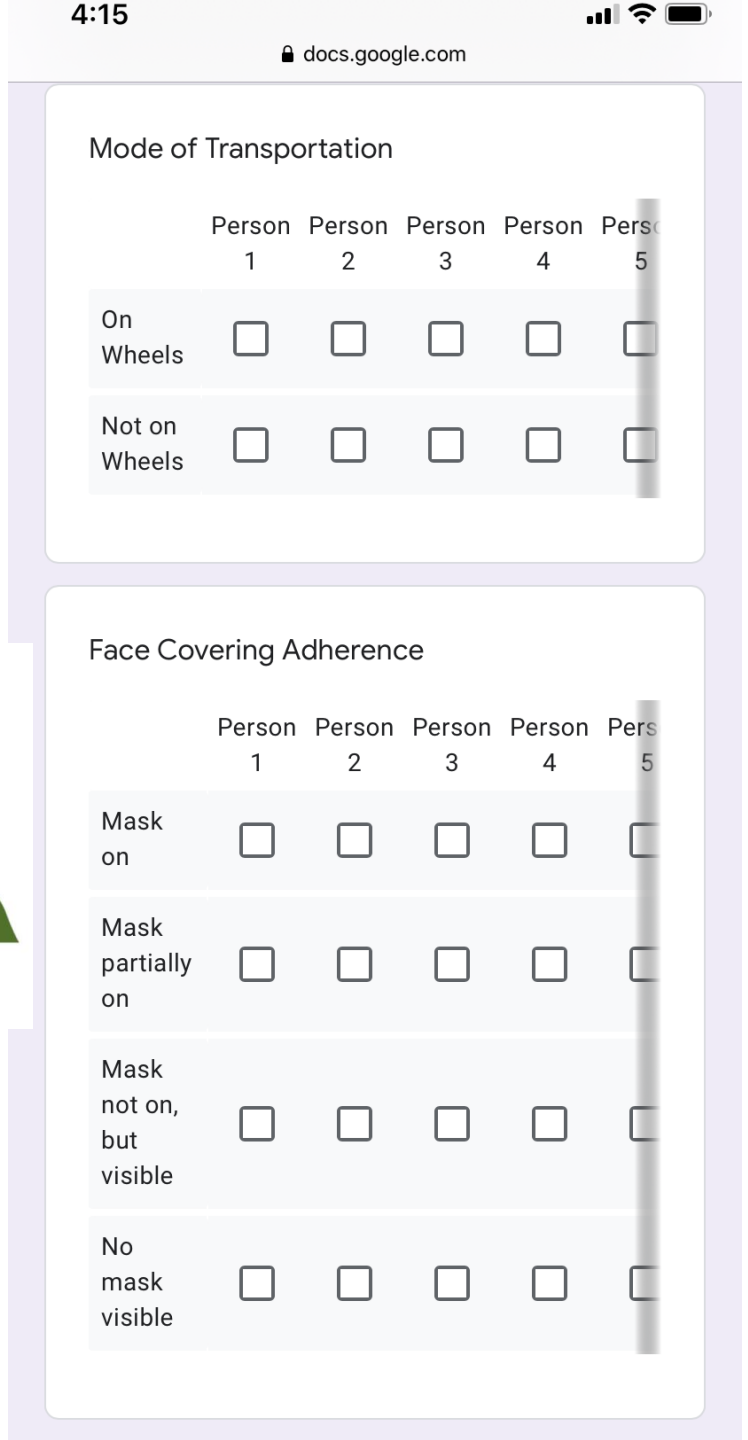
- It may be hard to distinguish race/ethnicity when people are wearing masks. If you cannot tell or it is one not listed, like Pacific Islander or Native American, mark “unable to determine”
- **Sedentary** means no movement (e.g. lying down, sitting or standing in place)
- **Moderate** (activity not requiring energy beyond an ordinary walk)
- **Vigorous** (requiring energy more vigorous than an ordinary walk), including running and climbing



Transport and Face Covering

- **Transport** is designated as to whether people are moving on wheels or not
  - Sitting would be coded as not on wheels
  - Children in strollers coded as on wheels
- **Face coverings** have 4 options:
  - Mask on: fully covering mouth and nose
  - Partially on, either mouth or nose exposed
  - Not on, but visible- e.g. in hand or hanging around the neck
  - No mask visible





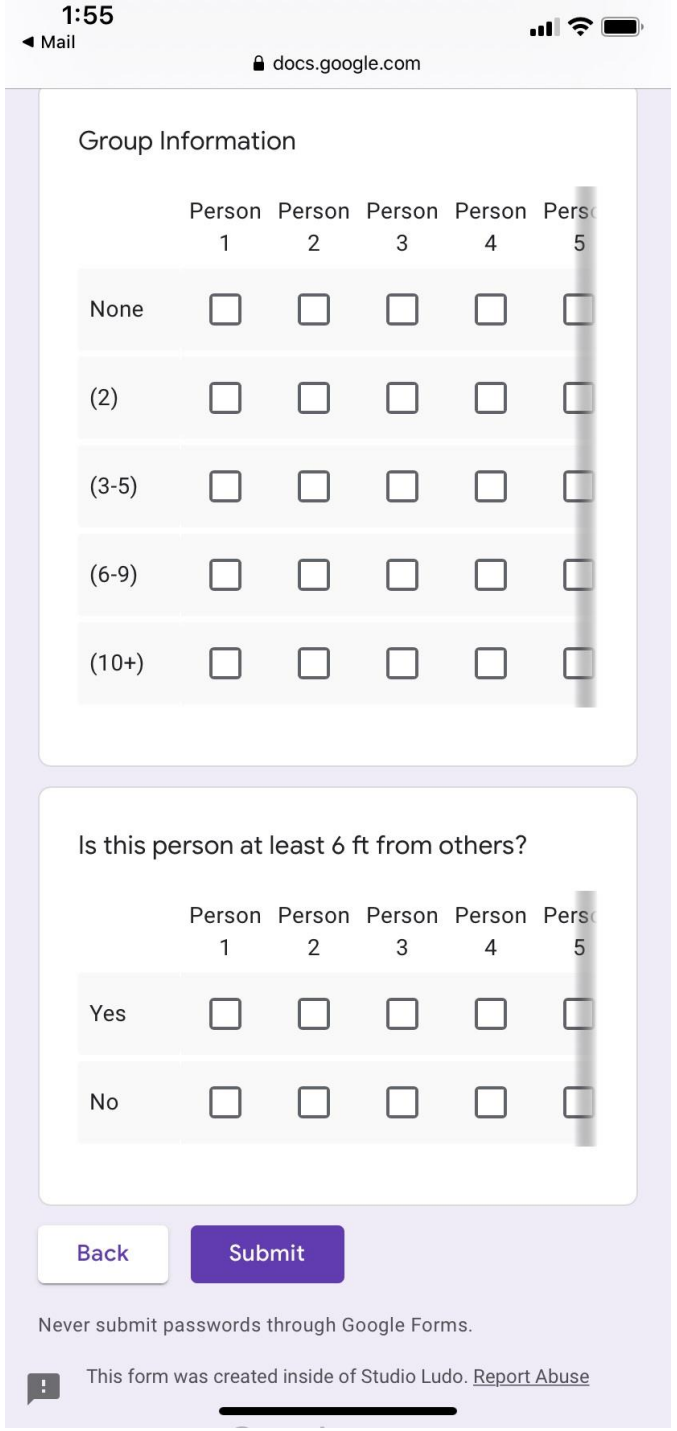
Group and Distancing Information

Group: *(5 options)*

- Not in group
- In group (2 people)
- In group 3-5 people
- In group 6-9
- In group, 10 or more

Distancing *(2 options)*

- Not within 6 ft of others (e.g. alone)
- Within 6 feet of any other person

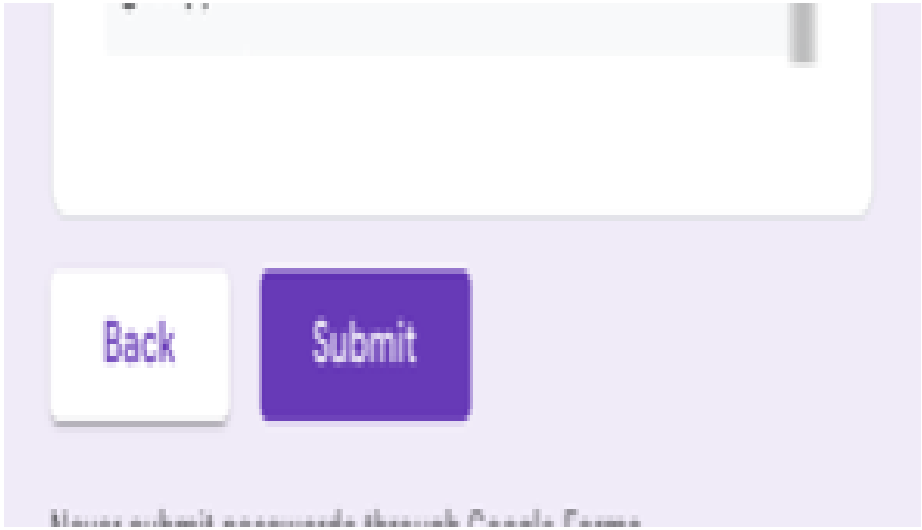


In the flatlands, the groups are within 6 feet of each other, but 6 feet from other groups.

On the slopes most are with 6 feet of each other AND within 6 feet of other groups.

Submit!

- When you are done with the hour of observing people passing the coding station or counting people in all the designated target areas,
- Or have reached data on 30 individuals, click submit!
- You need to complete the cover page for every 30 observations



Challenges with Data Collection

- You may not be able to record every single person who goes by on path observations
- Just record up to 4 people at once. When you finish recording, look up and record the people who are currently coming by
- It is ok if you miss some people
- We are only observing a sample

Technical challenges

- As you enter data for people, it is important to line up the person number for all variables so you record data for the same person on the same number
- You should not enter more than one choice for each variable. Currently, if you do that, you will only be alerted as to the error when you submit
- Occasionally we have had instances where the form would not allow data entry– not sure why that happened
- Don’t let your phone sleep/hibernate, as it’s possible data may be lost

Data Integrity

- The results we get depend on the accuracy and integrity of the data you send
- Be as accurate and complete as possible
- Record what you see
- Stay objective

Verify data collection

- All data collectors should follow a pre-arranged schedule
- Data collectors should take a selfie when they arrive at the site and submit to supervisor
- They should take another selfie at the site before they leave and submit
- The selfie should include pictures of the setting with identifiable characteristics to prove you were there.
- The pictures should have a time stamp to verify the time and date of data collection.

What happens next?

- Every month, we will send you a excel file of your data and a summary of everyone else's data by city
- You own your own data and can do with it what you wish
- We hope you will share it with the local health department, local officials, populations and news outlets to let everyone know how your community is doing
- We will share the national summaries as well
- We can coordinate any publications to avoid overlap and to fairly share credit and authorship

Are you interested in collaboration?

- If you want to collaborate, please let us know
- Send us your plan for observing locations and a general schedule
- We will send you the link to google forms
- If you do use the data locally, let us know how you shared it

- Contact Deborah.a.cohen@kp.org

Thanks!