Can Face Masks Reduce Transmission of SARS-CoV-2 in Bangladesh? A Cluster Randomized Controlled Trial

ASYMPTOMATIC RCT Intervention Protocol

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Bangla catchy song 1 - MASK PORAR GAAN | THE METRONOME (1:07)
Bangla catchy song 2 - Ne Ne Mask Poira ne (3:37)

Poster_mask wearing and washing

Poster_a_info

Poster_b_values

1. Common terms

Prominent Market: The selected market of each selected union has at least 20 vendors such that the associated village has a prominent mosque.

Primary Distribution Site/Primary Site: The village where the prominent market is located will be our primary distribution site or primary site

Prominent Mosque: The mosque where most people of each selected village from the primary site go for the Jummah prayer.

Study Catchment Area: There will be a few villages around the primary site from which people come regularly to this prominent market and prominent mosque. We can call these groups of nearby villages/urban neighborhoods as our study catchment area

Household member: Person that eats from the same cooking pot
- If a person is currently away but is expected to return in the next 4 weeks, then they count as a household member.
- If a visitor is expected to stay for at least the next 4 weeks, then they count as a household member
- If a person visits occasionally (once every few months), then they do not count as a household member

Knowledgeable Person: They are the persons having knowledge and can share reliable information regarding the study catchment area and the secondary distribution site. They could be local shopkeepers, headmaster of that village, chairman, member, or anyone else. Age is not a main factor here. Enumerators can select any person as a Knowledgeable Person if s/he can give us important information that we need.

Catchment Area Map: The catchment area map includes the primary site, prominent market, and nearby villages from which people come to this mosque and market.

Vendor: A vendor is an owner or the manager of a shop

SOP: Standard Operating Procedure

2. Introduction and background

In this pilot, we will test methods that we are considering for the mask RCT to identify the impact of masks of ASYMPTOMATIC transmission.

- Implementation activities include mask distribution and promotion of wearing masks.
- In ASYMPTOMATIC RCT, we will work in the 1200 villages; among these villages we will work in the old 600 villages that participated in the original mask RCT. In each of the villages, there should be a prominent market and a prominent mosque that was scoped in the original mask RCT.

Supervisors and enumerators will be trained on baseline data collection, mask distribution (including the variations in the script associated with different randomization), dissemination of guidelines for wearing masks, surveillance, and blood collection.

For ALL activities, enumerators should ALWAYS carry their IPA ID card, a2i letter, hand sanitizer, and fully charged tablet/smart phone. Enumerators should ALWAYS wear the mask we are handing out in that village (i.e. cloth or surgical depending on the village) and stand one arm length away from people when talking to them. If it is possible, the conversation should take place outside.

There are a variety of media platforms that we can use for promotion. See Media for ASYMPTOMATIC mask study

The behavioral psychology underpinning promotional strategies is here, and below: ASYMP study_Behavioral psychology ideas to increase mask-wearing

3. Scoping visit to identify study catchment areas

Approximately 600 of the 1200 villages in the study have already been scoped. For the approximately 1200 villages that have not yet been scoped, follow the activities described in this and the next section.

In each study union, supervisors and senior enumerators will conduct scoping visits

- Materials: The people carrying out scoping visits should carry art paper or poster paper and two color markers for drawing maps.
- Meeting with a few knowledgeable persons (see definition); these knowledgeable people do not have to be community leaders like political leaders, appointed officials or influential community members. Follow the 1_Script for knowledgeable people in community PRE-RANDOMIZATION.

- Enumerator will record in SurveyCTO
  - Number of households in village
  - Name and descriptive location of the prominent market
    - % of primary market customers that come from another union
  - Name and descriptive location of the nearest village to the prominent market and market committee leader
  - Name and descriptive location of the prominent mosque associated with the prominent village
  - Name and descriptive location of popular tea stalls, restaurants, workplaces, rickshaw stations
  - Descriptive location of village entrances
  - Descriptive location of popular places where surveillance might take place
  - Name and contact information for community leaders
  - Do NOT record GPS coordinates. GPS coordinates will NOT be recorded during this conversation; instead the GPS location will be recorded when the market/mosque/tea stall/village entrance is visited
- From the above information, supervisors will draw a rough map of the primary site (village in which the prominent market or mosque or both are located) identifying the prominent market, and other nearby villages. We can call this map as the catchment area map that includes the primary site, prominent market, and nearby villages from which people come to this mosque and market. Please note that we will have a catchment area map for both treatment and control areas.
- After identifying the primary site and catchment area and drawing the map, supervisors will identify community leaders from the primary site and speak with one or two of them. It is important that they speak with influential community leaders.
- Supervisors will meet with political leaders and will show the a2i letter to the leaders too to show that our work has been endorsed by the government. Read the 2_Script for Political_Community Leaders in PRE-RANDOMIZATION in a conversational manner and ask for their consent in encouraging and enforcing mask wearing.
- Enumerator will record in SurveyCTO
  - Leader's names and contact info
  - Degree to which leader understood the script
  - Number of households in village
  - Name, location, and size of mosque most people go to and if the mosque is visited by people from multiple unions.
  - Contact info of imam at probable prominent mosques
  - Name, location, and size of markets most people visit and if markets are visited by people from multiple unions
  - Contact info market committee members at probable prominent markets

○ Name and location of popular places
- The supervisors will also draw a plan for baseline data collection and mask distribution by identifying points from which the team will start and where they will end. Additionally, they will mark surveillance locations on the map.

4. Protocol for scoping visit

The following tasks should be done sequentially during the scoping visit

(1) Selecting the prominent market

In the union respective enumerators are in charge of, they will **find a market where the number of vendors will be around 30 to 50 ideally**. If the number of vendors is less than the ideal number, then the enumerators should select a market with at least 20 vendors. If the number of vendors is much higher for some markets, then the enumerators should choose a market which has around 50 vendors. For example, if 3 markets exist in a village and **the market has 100, 150 and 10 vendors respectively, then** the enumerators should **select the market of 100 vendors**. According to the above rules, this selected market will be called as the prominent market in our study.

Activities:

(i) Record the name of the market and GPS at different places in the market in the SurveyCTO form. If the places where the GPS will be recorded are different from one another, it will be easier for us to understand the boundaries of the market. (ii) Collect the information regarding the head of the market committee.

(ii) If no market committee exists, collect the name and phone number of the chairman of that area. Collect the information regarding the number of the pharmacies that exist in that market and enter the number in the SurveyCTO form.

(iii) Bazars which are closer to each other should not be selected as prominent markets if they are close to each other. Any one of the bazaars can be selected for that case. (v) Enumerators should maintain 6 feet physical distance while communicating with the bazar leaders, shop owners and other persons.

(2) Selecting the prominent village

If a village adjacent to the prominent market is selected in the following manner, we call it a prominent village.

Selection rules:

(i) A prominent village will be located adjacent to the prominent market. The boundary of the prominent village must fall within the boundary of the union of that market.

(ii) If a village is located within the boundary of two unions, it cannot be selected as a prominent village.

(iii) If several villages center one prominent market, then the village adjacent to that market or nearest to that market should be selected.

(iv) If several villages are situated at the same distance from the market, then you should select a village with around 200-250 households. However, this 4th option can never be considered before if the village can be selected by the preceding three options.

* Remember you should never select a prominent village before selecting a prominent market.

(3) Selecting the prominent mosque

The mosque where most of the people of the selected prominent village go to perform the Jummah prayer, should be selected as a prominent mosque. The prominent village and prominent market should be situated in closer proximity.

Selection rules:

(i) If such a mosque does not exist exclusively in that village, then the enumerators should select a mosque where majority people of the prominent village go for performing their Jummah prayer. This selected mosque can be denoted as a prominent mosque.

(ii) Enumerators can select a prominent mosque even though it falls in another union. Enumerators will not select a temple in place of a mosque for this study.

5. Baseline mask surveillance, prior to randomization (see section 13)

Before the intervention, conduct the surveillance as detailed in section 13.

6. Consent for nasal swab collection, prior to randomization

Enumerators who seek consent for nasal swab collection will be blind to the village's intervention status. Starting at the middle of the village (as defined by at least three community members), the enumerator will randomly select 60 households per village to seek consent for nasal swab collection. We expect approximately 80% consent for the first round of nasal swabbing and reduced consent thereafter.

At the selected household, enumerators will follow this script: 4_Script for nasal swab CONSENT prior to randomizatio_ASYMP. It is best to record the verbal consent given by a participant; if the participant verbally consents but does not want their verbal consent to be recorded, they may still participate in the study.

Before coming to work, the staff members collecting nasal swab consent forms will need to fill out the 1_Symptom checker and supervisor guide that includes the following:
1) Onset of new symptoms, including fever, cough, difficulty breathing, sore throat, muscle/body aches, vomiting or diarrhea, or loss of taste or smell
2) Onset of aforementioned symptoms in a household member
3) Close contact without a mask (for at least 15 minutes, within 1 m distance) with an individual who has the aforementioned symptoms
4) Close contact without a mask (for at least 15 minutes, within 1 m distance) with an individual who has a known COVID infection

Before going to the field, supervisors will ensure that enumerators are properly wearing their masks (the supervisor does not need to take a group picture).

The supervisor and enumerators will follow the following SOP:
● The supervisor will ensure that each of his team members has fully charged tablets/smartphones, two/three power banks, sufficient number of masks and informational stickers to distribute to each household. Each member should carry a copy of a2i letter and IPA ID card. Enumerators should wear face masks and carry alcoholic hand rub supplied by IPA.
● Enumerators will ask to speak to an adult member present, preferably the household head. In the absence of the household head, enumerators will ask for the adult(s) in the order of who has more influence in household decision-making.

Mask surveillance staff, mask promotion staff, and nasal swab collectors should not be told about village assignment until AFTER baseline mask surveillance and consent

7. Initial visits at INTERVENTION sites

It is important that the baseline surveillance data collection in mosques and markets take place before visiting treatment mosques and markets to take consent for participation.

7.1 Re-visit of community leaders in INTERVENTION villages

- Enumerators should carry sufficient numbers of masks to give to community leaders.
- Community leaders (Could consider forming a committee)
    - chairman
    - member (of what?)
    - political leader (is this different from the chairman?)
    - president of the market
    - pharmacists
    - teachers
    - local doctors
    - imams
    - small business owners?
    - local respectable people - by status or age
- How can we easily identify these community leaders?
- Leaders - what incentives do they need? Read the 8_Script for Political_Community Leaders in INTERVENTION villages_ASYMP to the leaders, and ask for their consent to participate and support the study.
- We will also ask the leader to support the project in specific ways. Ask the leader to choose 3-5 activities he will do to support the project.
    a. Require masks in indoor or crowded locations, on buses, in schools, in mosques, etc. "No mask, no service" / "No mask, no entry"
    b. Stress the importance of masks above other precautionary activities "Masks matter most"
    c. Ask a chowkidar to accompany our reinforcement staff once per week for the first four week
    d. Leader accompany promoter for the part of the day that is most relevant
        1. market
        2. mosque
        3. tea stall
        4. entrance of the village
        5. restaurant
    e. Invite our staff to come to political / community gatherings and allow our staff to speak to the crowd for 5-10 minutes

1. one FGD member said there are political gatherings almost every day
f. Let our staff know the time and location of community gatherings so even if we don't have a chance to speak, we can still do reinforcement
g. Wear mask themselves so they are a role model AND remind people to wear a mask
h. Encourage community members to consent to nasal swab collection
i. Encourage local welfare organizations to support mask promotion
j. Do promotion on their own - if our staff promote in a location in the morning, the leader can promote in the afternoon (leaders are not likely to do this)

- Enumerator will record in SurveyCTO
  - Degree to which leader understood the script
  - Which activities the community leader consented to
  - Agreed date of household mask distribution (should be fixed already but leaders may have pointed out some conflict with initial date)

7.2 Initial visit at INTERVENTION prominent mosques

- Enumerators should carry sufficient numbers of masks to give to imams and muezzins and hard copies of the Khutbah speech.
- Depending on whether the village was randomized to values or information, read [9_Script for preparation at INTERVENTION mosques_ASYMP](#) to the imam, and ask for their consent to participate and support the study. Consent has three parts. The leader may give consent for up to all of the activities.
  - 1. Allowing our enumerators to position at the entrance points, distribute masks
  - 2. Wearing a mask while leading worship
  - 3. Reading the Khutbah script
  - Supporting the intervention with specific activities
    - Messaging that Muslims are not immune to COVID
    - Messaging that you can be heard even if you have a mask on
    - Telling people it is okay and good to provide a few drops of blood for the study
    - Wearing a mask even when not in the mosque
    - when they are outside the mosque, ask people to wear masks (act as reinforcers)
    - Be in a poster with a mask on
      - What do imams think about having their photos posted?
    - In villages with school intervention: Ask imams to give talks in schools to the children to tell them to wear masks in school and

outside of school in crowded spaces? Reemphasize that it is a sign of respect for other people and especially their elders.
- ○ Imams can emphasize that you can be heard even if you have a mask on
- ■ With Imam's and muezzin's help, the enumerator will find out important entrances to the mosque for mask distribution.
- ● Enumerator also asks how many people usually come on Jummah prayers and record the number in SurveyCTO.
- ● Enumerators will discuss the planned date of mask distribution and agree on a date (in case the imam suggests some problem with the planned date).
- ● It might be possible that enumerators have to speak with a few members of the mosque committee. If this happens, they will read the same script.
- ● Enumerator will record in SurveyCTO
  - ○ Imam and muazzin's names and contact info
  - ○ Degree to which imam understood the script
  - ○ What activities the imam consented to
  - ○ Where to stand for distribution
  - ○ how many people usually come on Jummah
  - ○ Agreed date of mask distribution (should be fixed already but leaders may have pointed out some conflict with initial date)
  - ○ The percentage of people from other unions that visit the mosque
  - ○ GPS coordinates of the mosque

9. Nasal swab sample collection

We will approach 66 of households in each village (~30% of all households in each village) and the single highest risk person (available to be tested) to participate in a rapid diagnostic test (RDT) for COVID antibodies

It is likely that during the week the highest risk person in the household may not be home. To increase the likelihood that the highest risk person is home at the time of the blood collection visit, blood sample collection will happen Friday, Saturday, Sunday, Monday, Tuesday, and Wednesday.

At the household / vendor, the blood collection staff member will read 5_Script for nasal swab COLLECTION in CONTROL and INTERVENTION households_ASYMP

10. Mask distribution in INTERVENTION villages

One field team (most likely 1 supervisor and 10 enumerators, with at least one female per team) will be assigned to conduct baseline data collection and mask distribution in one village. Before coming to work, enumerators will need to fill out the 1_Symptom checker and supervisor guide that includes the following:

1) Onset of new symptoms, including fever, cough, difficulty breathing, sore throat, muscle/body aches, vomiting or diarrhea, or loss of taste or smell
2) Onset of aforementioned symptoms in a household member
3) Close contact without a mask (for at least 15 minutes, within 1 m distance) with an individual who has the aforementioned symptoms
4) Close contact without a mask (for at least 15 minutes, within 1 m distance) with an individual who has a known COVID infection

Before going to the field, supervisors will ensure that enumerators are properly wearing their masks (the supervisor does not need to take a group picture).

10.1 Mask distribution at households

All households in the selected intervention villages will receive masks. We have a few variations (randomizations) in delivering the treatment. Two of these variations are at the village level and two of these are at the household level. **The scripts associated with the different randomizations will be programmed into the tablet.** SurveyCTO will automatically choose the script based on the village ID and household ID entered by the enumerator.

The supervisor and enumerators will follow the following SOP.
- IPA operations team will ensure that enumerators have sufficient numbers of masks and informational stickers to each household of the village.
- The supervisor will ensure that each of his team members has fully charged tablets/smartphones, two/three power banks, sufficient number of masks and informational stickers to distribute to each household. Each member should carry a copy of a2i letter and IPA ID card. Enumerators should wear face masks and carry alcoholic hand rub supplied by IPA.
- Enumerators will ask to speak to an adult member present, preferably the household head. In the absence of the household head, enumerators will ask for the adults in the order of who has more influence in household decision-making.
- The enumerator will follow the 11_Script for mask distribution in INTERVENTION households_ASYMP to provide the intervention. **Make sure enumerators read the script VERY CAREFULLY and understand the different components.**

- SurveyCTO will tell what color of masks enumerators have to give to this household based on village id and household id (which depends on the household-level randomization).
- Enumerators will ensure that the respondent member understood the informational sticker on mask wearing.
- Enumerator will fill out the SurveyCTO form and submit the form and move to the next household.
- Supervisors will ensure that all SurveyCTO forms are submitted as soon as possible.

10.2 Mask distribution in prominent mosques

- Contact Imam through phone on Thursday night before the intervention day.
- On the mask distribution day, promoters will meet the imam around 11.30 AM and take necessary preparatory activities. Enumerators will remind the imam about delivering the speech about masks. Enumerator will hand over a copy of the speech to the Imam.
- Two enumerators will stand on each entrance and will give one mask to each person who is trying to enter the mosque and is not wearing a project mask (people who have no mask or a mask that is not a project mask should all be given a project mask. Mask distribution staff should follow this script: 13_Script for mask distribution at INTERVENTION markets/mosques_ASYMP
- The promoters will ask for the help of the Imam and muazzin to ensure that every person is wearing a mask over their mouth and nose before entering the mosque.
- This process will be repeated on each intervention Friday (4 Fridays in total).

10.3 Mask distribution in INTERVENTION prominent markets

- The goal of the mask promoters is to give masks to as many people as possible who are entering the market without a mask or with a poor quality mask. They can use their discretion as to how to accomplish this task - they may choose to stand at one entrance, to rotate among entrances, or to sometimes stand at the entrance and sometimes roam around. One mask distribution staff member will stand on each entrance and will hand over masks. Mask distribution staff should follow this script: 13_Script for mask distribution at INTERVENTION markets/mosques_ASYMP
- An audio script (14_Script for audio at INTERVENTION markets_ASYMP) should be played every 20 minutes starting on the 10 of the hour (e.g. 12:10, 12:30, 12:50) over a loudspeaker that is brought by the distribution staff.
- Play Bangla catchy song 1 - MASK PORAR GAAN | THE METRONOME (1:07) every 20 min starting on the 5 of the hour (e.g. 12:05, 12:25, 12:45)
- Play Bangla catchy song 2 - Ne Ne Mask Poira ne (3:37) every 20 min starting on the 20 of the hour (e.g. 12:20, 12:40, 1:00)

- *This frequency is VERY high and people might get annoyed, but let's try it for the first week*
- In front of the pharmacy, hang the [Poster_mask wearing and washing](#) AND [Poster_a_info](#) OR [Poster_b_values](#), depending on village randomization
- This process for mask distribution will be repeated on each intervention day.

11. [Intentionally left blank]

12. Mask reinforcement

What is promotion and why is it important?
- Most people have a mask in their pocket or purse but choose not to wear it; before giving a mask, ask if they have a mask and explain why it is important to wear. ONLY distribute if you've determined they don't have a mask. This prolonged engagement is slightly more socially awkward and therefore likely more effective.

12.1 Promotion by mask promoters

The following SOP will be followed to maximise compliance with the intervention at the primary distribution sites:

(Note: small markets have <70 vendors [1/3 of the sample]; big markets have >70 vendors [2/3 of the sample])

- After the household mask distribution is complete, mask promoters will be active in the community to encourage everyone to wear a mask and supply individuals with a mask, if necessary.
- **Mask promoters will maintain a strong relationship with the community leaders and try to meet /greet them whenever possible to make a strong bonding, ask for their cooperation and thank them.**
- Mask promoters will carry their IPA ID, the letter from a2i, alcoholic hand rub, and extra masks to distribute to anybody who is not wearing a mask distributed by our project. Mask promoters will hand out surgical and KF94 masks in all treatment villages.
- Mask promoters will read 15_Script for mask promoters in INTERVENTION villages_ASYMP in a conversational manner. The script covers different scenarios:
  - (1) If the person has a mask but is not wearing it / wearing it properly
  - (2) If the person does not have a mask and they are:
    - (i) Willing to go back home to put on the mask before continuing
    - (ii) Unable to go back to get a mask or do not have a mask
  - Promoters need to be aware of the misconceptions that people have so they can address them in their conversations with community members
- An audio script (14_Script for audio at INTERVENTION markets_ASYMP) should be played every 20 minutes starting on the 10 of the hour (e.g. 12:10, 12:30, 12:50) over a loudspeaker that is brought by the distribution staff.
- Play Bangla catchy song 1 - MASK PORAR GAAN | THE METRONOME (1:07) every 20 min starting on the 5 of the hour (e.g. 12:05, 12:25, 12:45)
- Play Bangla catchy song 2 - Ne Ne Mask Poira ne (3:37) every 20 min starting on the 20 of the hour (e.g. 12:20, 12:40, 1:00).
- Mask promoters should also start a discussion at least once in each location following 18_Script for mask promoters motivational discussion in INTERVENTION villages_ASYMP
- Promotion staffing is as follows:

- Week 1 : 6-7 days promotion in week 1 (3 days distribution+3 days community/market promotion and distribution+1 Friday focus on mosque if the first friday doesn't fall between the household distribution days
  - 2 promoters (main and assistant) will distribute mask in every household of that village for first 3 days (day off is the day the market is closed);
  - then the main promoter will do the community-level promotion in the next 3 days
  - 2 promoters distribute mask in mosque on friday including Khutbah speech promotion (if the first friday doesn't fall between the household distribution days)
- Week 2 : 4 promotion days in community/market +Friday focus on mask
  - 1 main promoter mask distribution and promotion in community/market for 4 days
  - 2 promoters distribute mask in mosque on Friday including Khutbah speech promotion
- Week 3: 2 promotion days in community/market +Friday focus on mask
  - 1 main promoter mask distribution and promotion in community/market for 2 days
  - 2 promoters distribute mask in mosque on Friday including Khutbah speech promotion
- Week 4: 2 promotion days in community/market +Friday focus on mask
  - 1 main promoter mask distribution and promotion in community/market for 2 days
  - 2 promoters distribute mask in mosque on Friday including Khutbah speech promotion

Promoters should work where the people often gather, including political meetings, bike repair shops, tournaments, and fairs. Whenever they are at a busy location, they should wander around the market and approach people who are not wearing masks, especially large groups of people. When people are relatively stationary, it would be a good time to conduct the mask-wearing discussion 18_Script for mask promoters motivational discussion in INTERVENTION villages_ASYMP . (Do not promote at upazila health centers because these are not in our villages.)

While there is no set schedule specifying when promoters should work where, an example schedule is as follows
1. Market (~8 am) – 1 hour
2. Restaurant (~9 am) – 1 hour (Breakfast only. Lunch is rarely crowded)

3. Main Road (~10 am) – 1 hour
4. Tea Stall / bike repair shops (~12 pm) – 1 hour
5. Mosque (Dhuhr, ~1:00 am)
6. Main Road (~2:30 pm) – 1 hour
7. Mosque (Asr, ~3:45 pm)
8. Market (~4:00 pm) – 1 hour
9. Mosque (Maghrib, ~5:15 pm)

12.2 Promotion by community leaders

- See page 16

12.3 NO Randomized encouragement through texts

13. Surveillance

Surveillance activities should be inconspicuous, meaning people should not know that they are monitored. Staff who are conducting surveillance should carry their IPA badge and a2i letter but NOT wear the IPA badge.

Surveillance staff will record the mask-wearing behavior of each person they see as
1. Wearing a mask that covers the nose and mouth
2. Wearing any mask that does not cover the nose and mouth
3. Wearing any face covering that is not a mask (e.g. dupatta), whether it covers the nose and mouth or only one of them
4. Not wearing any mask or face covering

Each person should only be recorded once per observation session per observation site (don't record the same person twice while observing in the morning at the market, but okay to record the same person once in the morning in the market and once outside a restaurant. It will be difficult to remember who was recorded and who was not, so this should make it easier for the surveillance staff.)

Surveillance will be conducted at baseline and endline and several times during the study as a form of monitoring implementation quality.

13.0 Surveillance for monitoring implementation fidelity
- Observing promoters for qualitative feedback

- ○ IPA field supervisors will observe each promoter 1-2 days / week for the first two weeks of the intervention (in the initial RCT GreenVoice staff did this supervision, which is not ideal because they were monitoring GreenVoice staff)
- ○ Field supervisors will fill out a standard survey form with comment box.

13.1 Surveillance in the community (village)

- Mask surveillance staff will conduct surveillance at pre-assigned locations in the primary site, including entrance to the village, main roads, tea stalls, and outside restaurants. **The surveillance staff should mark their location with GPS at the start of each observation period.**

13.2 Surveillance in the prominent mosque

- Mask surveillance staff will stand in the corner of the mosque by the door.
- On non-Jummah days, observations will be made only during Johor (Dhuhr), Asr, or Maghrib. The observer will try to observe people at all 3 prayer times and arrive 10-20 minutes before prayer is supposed to begin. Enumerators need not to conduct the surveillance after 6 pm.
- Since it is a cultural norm that phones, tablets, and other electronics are not used inside the mosque, enumerators will complete this part of the data collection with pen and paper and then transfer to SurveyCTO as soon as they exit the mosque.
- The observer will make an entry for each person at the mosque once the person is standing or sitting still (so it will be clear if that person is practicing physical distancing or not).
- **IN INTERVENTION MOSQUES, after intervention:** Surveillance enumerators will monitor if the Imam correctly delivered the speech and record the quality of delivery in a SurveyCTO form. This should be done as discreetly as possible.
- If the surveillance staff member has recorded the mask-wearing status of all people at the mosque, the staff member may move on to the next surveillance site; they do not need to stay the entire hour recommended for surveillance.

13.3 Surveillance in the prominent market

- Observations must be made when the market is open.
- Respondents will observe people who are both sellers and customers at the market.
- Because markets can be very crowded, **the surveillance staff will position himself at the entrance to the market,** where he can record the number of people wearing masks without being overwhelmed.

13.4 Surveillance at tea stalls

- Enumerators should try to figure out the biggest tea stall or group of tea stalls in the village.
- If there are multiple tea stalls together, the enumerator will position himself so that he has a good view of the entire area and record the people at all the tea stalls.
- Observe people sitting in the tea stalls and people walking around the tea stalls.
- If the tea stall is on the main road, the enumerator will go to a different spot to make the observations of the main road.

13.5 Surveillance at the village entry point/main road

- The observer should observe mask-wearing by people walking the streets as well as people in rickshaws and van garis and other vehicles.
- Enumerators may find several entry points of a village. They should consider only one entry point that is most crowded based on the scoping visit/comment from the knowledgeable persons.
- During the observation, the enumerators should try to stand in a place that is not very crowded.

13.6 Surveillance at the restaurant

- Observations must be made from outside the door of the restaurant, for people as they enter the restaurant.

13.7 Surveillance SOP

One surveillance staff member will be assigned to conduct surveillance in two nearby villages. Surveillance should be conducted any day other than Friday so there isn't a bias due to active mass distribution of masks in the intervention villages on Friday.

Enumerators will try to find locations where there are plenty of people available for surveillance. But once they have picked a spot in one village on the first day of their surveillance, they will need to make sure that they return to the exact same spot and at the same time on each surveillance visit to that village.

Below is an example routine for enumerators to follow each day. Enumerators should follow this routine every day that they do surveillance. For example, if they observe the market between 7-8 am on Surveillance week 1, they will also try to observe the same market between 7-8 am on

Surveillance week 2 in the same village. If the routine cannot be followed, the enumerators will need to provide the reason for changing the routine in the comments section of the survey.

1. Market (~8 am) – 1 hour
2. Restaurant (~9 am) – 1 hour (Breakfast only. Lunch is rarely crowded)
3. Main Road (~10 am) – 1 hour
4. Tea Stall (~12 pm) – 1 hour
5. Mosque (Dhuhr, ~1:00 am)
6. Main Road (~2:30 pm) – 1 hour
7. Mosque (Asr, ~3:45 pm)
8. Market (~4:00 pm) – 1 hour
9. Mosque (Maghrib, ~5:15 pm)

Surveillance should be conducted at each site for 1 hour; surveillance at the mosque can end after mask wearing of all the people at the mosque has been recorded, even if the duration is less than 1 hour. After surveillance is complete in one location, the surveillance staff will move to the next spot on his list. The final observation will be the mosque during Maghrib prayer every day. Once they have finished their last observation for the day, they will enter the time they finished their work for the day. The survey will ask them whether they have covered all the locations that were assigned to them that day. Observers will try to make sure that they cover at least 8-10 locations each day.

13.8 Surveillance Survey

1. Enumerator Name
2. Village information: Broken down into district/upazila/union/village
3. Timestamp for when the enumerator starts making observations for the day.
4. Site where the observation will take place: Observers will identify one of the 5 locations where an observation can take place (mosque, market, restaurant, tea stall and main road).
5. Timestamp and GPS for when the observer starts making observations at this spot.
6. Observations: For each person that the observer sees, they will list the following:
   a. Wearing a project mask that covers the nose and mouth
   b. Wearing a non-project mask or face covering that covers the nose and mouth
   c. Wearing any mask or face covering that does not cover the nose and mouth
   d. Not wearing any mask or face covering
7. Mask color - we will NOT record mask color because there are no household-randomizations

8. **Physical Distancing:** For a person to be counted as physically distancing himself/herself, he/she will need to be one arm's length away from all other people (for the sake of assessing risk compensation, this assumes that all nearby people are from different households). Enumerators must make sure that their definition of physical distancing is consistent across their surveys and across other enumerators.
9. Gender
   a. Female / male
10. Estimated age group
    a. 18-29; 30-49; 50-69; 70+
11. Actual age - we will NOT collect this information
    a. We will need to validate a subset of results by ASKING people their age to see how well our enumerators can guess
    b. We should only do this on the LAST day of surveillance because the surveillance staff member will reveal themselves to the community as a person who is watching —> IPA team is there some way to get the actual age without the surveillance staff member asking the observed person? Perhaps the promoter could ask them, but then the promoter has make sure they asked the same person who the surveillance staff person observed.
    c. This questions should be optional in the survey in case enumerators don't have time to ask the person their actual age. We should

13.9 Surveillance quality assurance and control

To assess the quality of the surveillance activities, we will conduct duplicate observations on 5% of surveillance days distributed over at least 50% of promoters. Duplicate observations will be conducted by IPA supervisors or a third-party firm.

14. NO Pharmacy enrollment

15. NO Telephone surveys for COVID symptom data

16. Endline blood sample collection and serology

At the endline (7 months after the start of the intervention), all individuals who provided baseline blood samples for testing by RDT should again be visited for endline blood sample testing by RDTs.

At the household, the blood collection staff member will read 5_Script for nasal swab COLLECTION in CONTROL and INTERVENTION households_ASYMP

17. NO Individual Experiment

18. Timeline / Implementation Plan
ASYMPTOMATIC Mask RCT-timeline and weekly plan.xlsx