

Supplementary Materials for
**Large-scale implementation of rapid antigen testing system for COVID-19
in workplaces**

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Published 25 February 2022, *Sci. Adv.* **8**, eabm3608 (2022)
DOI: [10.1126/sciadv.abm3608](https://doi.org/10.1126/sciadv.abm3608)

This PDF file includes:

Texts S1 and S2
Fig. S1
Table S1

Supplementary text S1: Standard Operating Procedure (SOP) Quick Start Guide

Note: Some previously active links have been redacted as they were relevant to CDL-RSC participants at the time of the pilot. The respective hyperlinks have been removed and are noted with a †.

Quick Start Guide

National Edition (last updated as of July 16, 2021)

The steps below will help organizations launch their Rapid Screening Program quickly. This is especially useful for small to medium sized organizations.

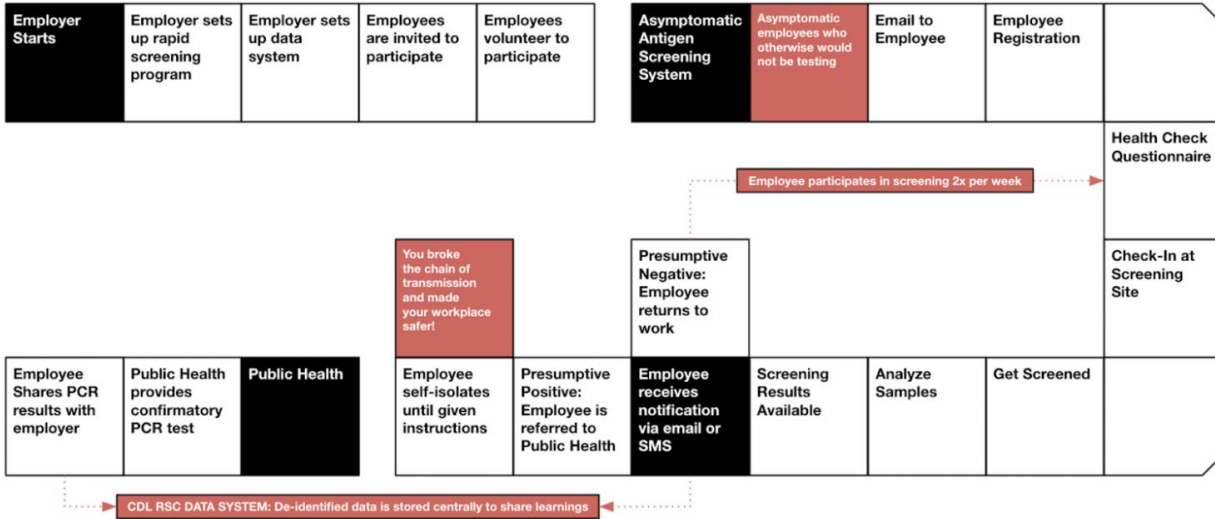
1. **Decisions and Prep Work** - decisions and prep you need to do before you start screening your employees
 - a) Decision - Who to Screen
 - b) Decision - Data Solution that you'll be using
 - c) Project Launch Schedule
 - d) Communications and buy-in of the leadership & union teams (if applicable)
 - e) **Determine Roles and Responsibilities**
 - f) Decision - Screen Administration you'll be using (or combination of)
 - g) Decision - Mandatory or Voluntary screening program
2. **Paperwork**
 - a) Forms and submitting of data
3. **Screens and Supplies - Determine how many screens and supplies will be needed.**
 - a) Design Basis Calculator - determine how many screens and screening stations you'll require
 - b) Bill of Materials - guidance on what supplies you will need for screening
4. **Screening Station Layout and Setup - guidance on setting up your screening station**
 - a) Layout Options - decide on which type of screening station layout you'll use for workplace screening including storage and waiting areas
5. **Communications and Registration** - steps to sign up your employees to the program including communications and consent
6. **Screening Frequency and Booking Appointments - guidance on screening frequency and booking appointments for screening**
 - a) Screening Frequency - Minimum 2x per week
 - b) Booking Appointments for Workplace Screening
 - i. Decisions on appointments needed or walk-ins - or combination
 - ii. Excel or MS Bookings (not required if using an app)
7. **Ordering and Managing Screens - guidance on ordering screens & inventory control**
 - a) Ordering and Managing Screening
 - b) Inventory Control

- i. Workplace Screening Process
 - ii. @Home Screening Process
8. **Training** - guidance on training the Trained Professional and training employees for Self Administration and @Home Screening
9. **Screening and Controls** - **guidance on how to use the screens including the control swabs and waiting for results**
 - a) Abbott Panbio
 - b) BD Veritor
 - c) Controls
10. **Waste Management** - **guidance on how to manage waste from rapid screening**
 - a) Biohazard waste including @Home screening waste
 - b) Garbage and Recycling
 - c) Daily Cleaning
11. **Communicating Negative and Inconclusive Results** - **guidance on how to communicate negative and inconclusive results to program participants**
 - a) Excel Users
 - b) @Home Screening
 - c) Inconclusive Results
12. **Communicating Positive Results** - **guidance on how to communicate positive results to program participants**
 - a) In person Communication
 - b) Phone Communication
 - c) Email Positive Result
 - d) Other steps to take after a presumptive positive result
13. **Data Privacy and Consent** - **guidance related to the Consent Form and Data Privacy**
 - a) Data De-Identification and Aggregation
14. **Data Collection and Sharing** - **guidance on what data should be collected and how it is shared**
 - a) Select a Data Collection Solution
 - b) Collect Data from Screening Program Participants
 - c) Share Data with CDL RSC
 - d) Visualize Data
15. **Central Data Infrastructure** - information related to cybersecurity and access to the CDL RSC collected data (Central Data Infrastructure)

1 - Decisions and Prep Work

National Edition (last updated as of July 16, 2021)

This framework is a list of decisions and prep work that will need to be completed before you start screening your employees. The image below shows the journey from program kickoff to implementation and sharing data.



Decision - Who to Screen

CDL RSC recommends starting screening as soon as possible and this may mean that some organizations will start with a smaller group and then expand to the remaining employees. If your organization is small then it may be easier to start with everyone.

Decision - Data Solution

When deciding what data solution to use, the following should be taken into consideration.

- Number of people in the program:
 - The more people in the program the more robust and automated the data solution should be otherwise your screening project team will be very busy with administration.
 - For organizations with over 50 participants in the program it is recommended to use one of the Apps. The **Standard App** is the quickest and easiest to implement and recommended for most organizations.
 - Organizations under 50 people participating may choose to use the **CDL RSC Excel Template**. Using Excel may initially seem easier but in the long run the Standard App will take less time to implement and also require less time to manage.
- Does your organization currently use Microsoft O365, Azure, and/or Power Apps?

- If so, your IT team can likely deploy the **Enterprise App** directly in your environment in 3-10 business days.
 - CDL RSC has worked with Consortium Members to create standard code and templates that work with most workplace screening programs and do not require additional customization.
 - The Enterprise App is best suited for organizations with a robust data privacy and cyber-security framework, with the need to host and safeguard your employees' personal information.
- The recommendation for either App is to not customize as much as possible, as this will add implementation time and cost.

See articles [Data Privacy and Consent](#), and [Data Collection and Sharing](#) for additional information.

Project Schedule

Once your organization has determined who they will start screening, they can create a preliminary schedule with the key information.

It is important for organizations to launch their screening sites as quickly as possible as the sooner the screening starts and the more people that are screened, the sooner the chain of transmission can be stopped. It is better to launch quickly and make edits to the program as required, then to wait too long and there is an outbreak at the workplace.

The Schedule Template† is a helpful tool to start with when planning your schedule. Note that not all the task will be applicable to your organization.

Key milestones to include in your schedule are listed below:

- Implementation decisions - mandatory vs. voluntary
- Data Solution determined
- Communications - leadership, unions and employees
- Information sessions
- Screening Centre walk through (necessary changes made before dry run)
- Dry run with project team including process for a presumptive positive - see [Daily Checklist Template](#)†
- On-site training of Trained Professional(s) and employees
- Go/No Go Meeting
- Go Live

Leadership and Union Communication and Buy-in

One of the first prep work steps is to communicate the project objective, approach and preliminary schedule with the leadership team and the union leaders. Transparency and open communication are important for participant buy-in and this initial step to ensure that leadership and union leaders understand and support the initiative will help with participation later.

Roles and Responsibilities

You can now begin to assign roles and responsibilities amongst your team members. Depending on the size of your organization you may have multiple people with different roles and responsibilities or you have one person responsible for everything. If you have an HR team ensure that they are engaged to ensure alignment on the screening program. The main roles and responsibilities can be found [here](#).

Decision - Screen Administration

Screen administration should be considered early in the planning process as this will affect resources and site setup. Each province has its own regulations and refer to the weekly slide decks for more information regarding individual provinces. Recommendation is to speak to your CDL RSC Buddy for guidance in this area.

Screen Administration Options

1. Registered Health Care Practitioner (HCP) - Specimen collection (swabbing) for screen administration is performed by a registered HCP and program participants only need to lower their mask and the HCP completes all other steps of the process. A list of organizations that can provide HCP in Canada can be found [here](#). This [video](#)† shows the HCP administration.
2. Trained Professional (TP) - Specimen collection (swabbing), processing and results are all completed by a TP. A Trained Professional can be one of your employees that is very familiar with screen administration or they can be hired from another organization. They don't need to have prior experience in testing as the process is simple and anyone can be taught how to administer screening. See [Training](#) section for more information. A list of organizations that can provide TP in Canada can be found [here](#).
3. Self-administration - One or more steps in the screening process are performed by the participant. Can be supervised by a HCP or TP or not supervised at all. This [video](#) shows self-administration with a HCP or TP supervising.

Self-administration - steps in the process:

1. Self-swabbing - The individual being screened swabs themselves.
2. Self-processing - The process of mixing the swab with the buffer solution in the tube, adding drops to the cartridge and starting the timer.

3. Self-reporting - Once the 15 minutes is complete, read and record the results and share as required.

Considerations:

1. Organizations may choose to start with HCP before switching to TP and self-administration, and eventually home-screening. The goal is to start screening as soon as possible with as many participants as possible, and using a HCP or TP to start may be beneficial.
 2. Self-administration requires less resources to support the screening.
 3. Organizations that allow for self-administration should always have a HCP or TP available to administer a screen for someone that may have limited physical abilities to be able to perform it themselves.
4. @Home Screening - The participant performs all three steps of self-administration at their home, either virtually supervised or unsupervised. At this time, home-screening has only been approved by a limited number of provinces. This video[†] shows @Home Screening.
1. When initially starting home-screening, recommendation is to have the process virtually supervised to ensure the participant is comfortable with the procedure and that it is administered properly.
 2. Recommendation is to use an app so that participants can easily add their results and upload a photo of the result. This isn't required for small organizations and email or online surveys could be used.
 3. There is a risk of participants sharing the screens with family and friends. Inventory tracking and audits reduce this risk.
 4. Where permitted, home screening is especially beneficial for smaller locations where it would be difficult and costly to set up screening onsite.

Decision - Mandatory vs. Voluntary

Organizations will need to decide if they will make screening mandatory or voluntary. When deciding what works best for your organization it is important to understand that the higher the percentage of people that participate, the more likely you are to stop an outbreak from happening. This is shown in the table below.

The [Mandatory Rapid Screening Decision Tree](#) can be used to decide if your organization will make screening mandatory for entry to the workplace or voluntary.

A third option is to make screening a condition for entry. This wouldn't require making screening mandatory but an employee wouldn't be able to enter the workplace without proof of a negative screen. Alternatively they could work from home or another location if permitted.

2 - Paperwork and Forms

National Edition (last updated as of July 16, 2021)

There are a number of forms that need to be filled out once. Please see the list below.

1. [Letter of Agreement](#) - Must be signed once you decide to join CDL RSC.
2. [CDL RSC - Quick Start Form](#) - Please use this form to share details about screening site locations, for guidance on how to order rapid antigen screens, and register for the Thrive data solution (CDL RSC Standard App) and additional team members.
3. [Certificate of Inventory](#) - PROOF OF RECEIPT OF RAPID ANTIGEN TESTS (e.g. provided by the Provincial/Federal Government or otherwise). Please fill out this form upon receipt/purchase of new inventory of rapid antigen screens. Submit one Certificate of Inventory for each shipment.

For questions regarding the Letter of Agreement please contact your Project Manager.

3 - Screens and Supplies

National Edition (last updated as of July 16, 2021)

Supplies

In addition to the antigen screens you'll also need a number of supplies to be able to provide screening in the workplace. See photos below showing examples of the supplies needed for your screening station.



Below is a list of materials and supplies that you will need to set-up a rapid COVID-19 screening station in your workplace. List of items employees will need for @Home Screening is below the table.

In Nova Scotia, the provincial government provides PPE for organizations and please let your REN or local Chamber know what PPE you require.

Definitions

- **Screening Centre** - Area with multiple screening stations
- **Screening Station** - Individual station that has one participant enter at a time
- **HCP** - Healthcare Professional (professions vary depending on province. Refer to Regulatory Requirements for more information for each province).

- **TP - Trained Professional.** An employee or vendor at an organization that is specifically trained in all steps of screen administration.

	Section	Item	Description	Quantity
1	Set Up	Table	Minimum 2'x4' sturdy without casters or lockable casters	Minimum 2 per Screening Centre - to be used for check-in and results processing
2	Set Up	Chair	Task or training room type chair	Minimum 2 per Screening Centre - to be used at check-in, results processing and in each Screening Station
3	Set Up	Signage	Public Health reminders signage	See Screening Station Layout and Set up
4	Set Up	Tissue Box	Standard box of 72 tissues	1 per Screening Station.
5	Set Up	Plexi-glass/PVC partitions	Optional - maybe be required if you have multiple Screening Stations in an open area	Varies depending on organizations needs and number of Screening Stations
6	Set Up	Timer	Digital timer from 1 to 30 min	Varies depending on throughput. For maximum throughput 7-8 timers would be required for each screening station.
7	Set Up	Smart phone, tablet or laptop	Tablet or laptop for data management	Minimum 1 per Screening Station/Centre for results recording and communication
9	Set Up	Fine tip sharpie	Used for labeling tubes and cartridges	1 per Screening Station and at check-in and results desks
10	Set Up	Label stickers	Used for labeling tubes and cartridges	2 per screen
11	Set Up	Cart	Optional - Cart to move supplies to Screening Station	May be required if storage isn't in the Screening Station/Centre
12	PPE	Gloves	Vinyl, nitrile or latex exam gloves (nitrile preferred)	2 gloves per screen for HCP/TP if they are administering the swabbing. For Self-administration, 2 gloves per hour for the HCP or TP.
13	PPE	Gowns	Disposable isolation gown, fluid resistant, elastic wrists	1 for each HCP/TP for every 2 hours
14	PPE	Face Shields	Reusable face shield with foam cushion and ecstatic strap	1 per HCP/TP per week
15	PPE	N95 Face Mask	N95 medical respirator mask	1 for each HCP/TP for every 2 hours
16	Cleaning	Hand Sanitizer	Minimum 70% alcohol hand sanitizer with hand pump or motion sensor activation	1x 1 liter bottle per Screening Station (total of 1 liter bottle per every 200 screens)
17	Cleaning	Disinfectant spray	Disinfectant spray for cleaning of surfaces and equipment	1x 1 liter bottle per Screening Station/Centre (1 liter bottle for every 200 screens)
18	Cleaning	Paper towels	Paper towels to be used with disinfectant spray	1 per Screening Station (1 per day)
19	Cleaning	Biohazard Waste bag and container	Single use or reusable biomedical waste container with bag.	1 per Screening Station/Centre per day
20	Screen	Controls Kit	Control kit for selected screen	1 per every lot or more frequently as per manufacturer's recommendation
21	Screen	Testing Screen	Selected screen for your program	1 per screen
24	Screen	Cartridge Analyzer	Cartridge analyzer for reading screen results	Only used with the BD Veritor and the Quidel Sofia.

The following items are required for @Home Screening:

- Garbage waste container
- Sink and soap or hand sanitizer
- Cleaning supplies to be used after each screen
- Mobile phone or computer
- Tissues - for participant if they need to blow their nose prior to the swab
- Test kit for the day including:
 - Swab
 - Reagent and tubes
 - Test cartridges (also called cassettes)
 - Tube rack
- Timer (timer on phone is sufficient)
- Screen instructions for use

Screen Calculation

Use the calculation below to determine the number of screens required.

[Number of program participants x 2 (times per week each person is screened) x 10 (number of weeks you are ordering screens for)] + 5% (spoilage, training and contingency) = total screens required

Assumptions:

1. Each program participant will be screened twice per week for duration of the program
2. Screen ordering will be for 10 week intervals. If your organization will be @Home Screening and sending full kits home with employees, use 12 weeks as the kits come with 25 screens per box.

See [Ordering and Managing Screens](#) for additional information.

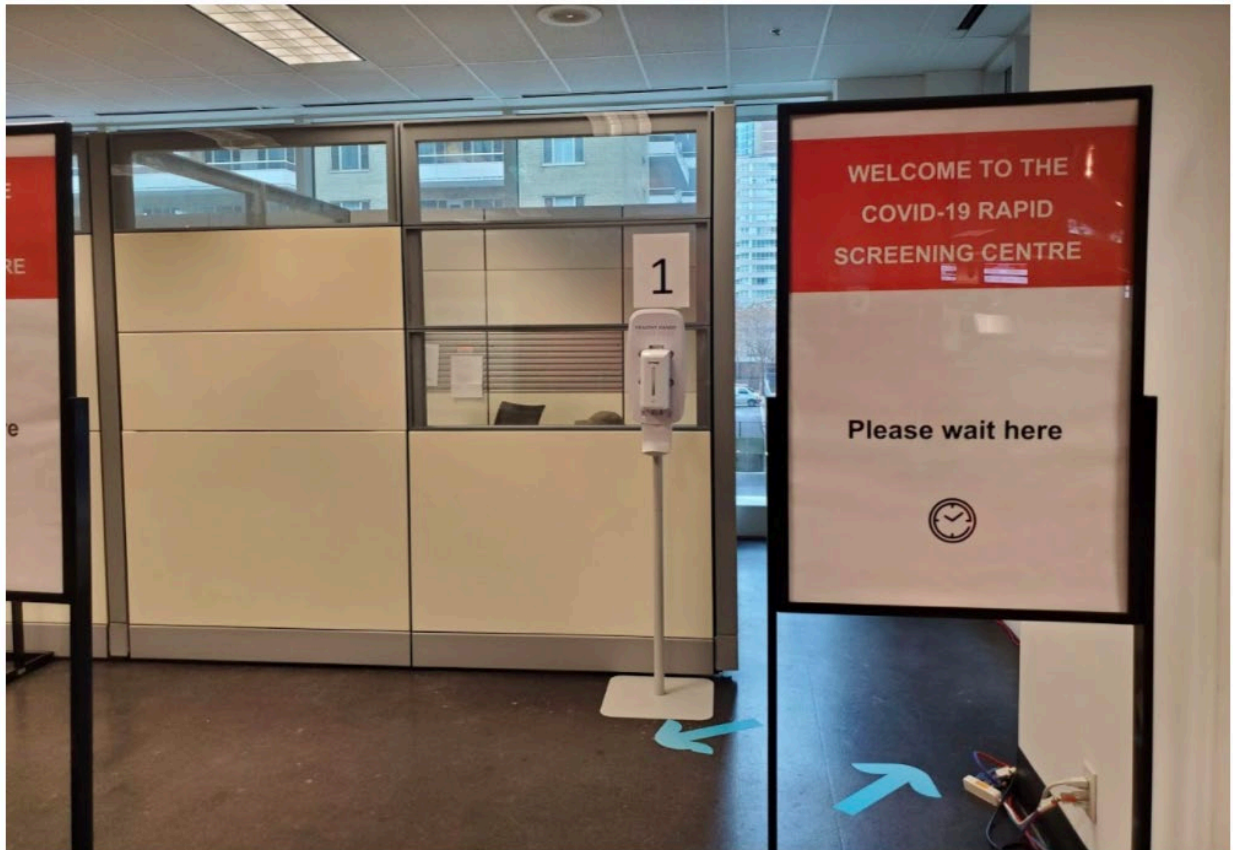
4 - Screening Station Layout and Setup

National Edition (last updated as of July 16, 2021)

Layout Options - Workplace Screening

Your screening station layout will depend on the type of screen administration that you will be implementing.

- Screening Stations for Healthcare Professional or Trained Professional administration
 - Recommend a room or space of at least 10'x12' for screening one person at a time with storage in the room. See an example in the image below.



- Booths for Self-administration
 - Recommended booth size of 4'x4' minimum with the results table across from the booth for supervision (if applicable). See example in the image below.



- Car screening (ideal for teams not located at a particular site, for example: technicians)
 - Option 1: Functions in same way as grocery curbside pickup, team stationed inside and comes outside upon arrival
 - Option 2: Drive through, no pulling into a spot, team outside to administer
- Mobile Screening Team (ideal for demand at several sites in close proximity)
 - 1 screening team travels to various screening sites

Screening Centres

Multiple screening stations or booths in one area will create a Screening Centre. The size of the Screening Centre will depend on the number of people in the pilot and the amount of time that screening takes place. Refer to the Design Basis Calculator.

Considerations:

- Smaller Screening Centres could use an individual office, meeting room or trailer ensuring there is space for a waiting area or in the case of a trailer that people can wait outside or in their cars.
- For a Screening Centre of two or more stations ideally the entrance and exit would be separate from each other to decrease the frequency of people crossing paths close to each other.
- Consider backup screening space to accommodate a deep clean after an employee has screened positive.
- Electrical power is required in each Screening Station for the following:
 - Laptop/tablet/desktop computer
 - Screen cartridge analyzer (only needed for specific screens types such as the BD Veritor, refer to Design Basis Calculator to determine if an analyzer is required for your screen).
 - Provide extension cords if electrical duplex receptacles are not close enough to the Screening Station(s).
 - Internet connection is required at each station for data collection and communication of results.

Storage

The size of the storage will depend on the number of people in the pilot and the number of screening stations. The project team should all have access to the storage room/cabinets to be able to stock the room and remove stock needed for daily screening. In addition to the screens, storage space is required for PPE for screen administrators if not using @home screen administration.

Abbott Panbio - One case (large box) of 800 screens (32 small boxes with 25 screens per small box) is about 19"W x 16"H x 21"D and 33 lbs with 12 cases per pallet.

BD Veritor - One case (large box) of 360 screens (12 small boxes with 30 screens per small box) is about 20"W x 17"H x 18"D and 24 lbs with 8 cases per pallet.

Considerations:

- Storage could be in a lockable room or in lockable storage cabinets.
- Storage space within the screening station should be large enough for all the materials needed for one screening shift.
- All storage should be close by and maintain temperatures of 15-30°C.

Waiting Areas & Traffic Flow

The size of the Waiting Area will depend on the number of screening stations with a recommendation of space for two - three people in the waiting area for each screening station. If participants are to wait in the Screening Centre for their results then the equivalent size space would be needed for the Results Waiting Area.

For programs with more than 50 participants it is beneficial to have a check in/administration person at the entrance of the Screening Centre to help with answering questions, pre-writing labels and assisting new people that want to join the pilot. This person would require a table/desk, chair along with a laptop and access to power and the company wifi.

Considerations:

- The waiting areas should allow for people to be 6' apart minimum
- Floor markings should be utilized to indicate where people should stand so that they maintain the required 6' apart.
- Considerations should be taken to ensure that walking paths don't cross.
- Stanchions could be used for traffic flow.
- Easy to understand signage should be used so that people understand what is expected of them.
- Provide hand sanitizer stands throughout the waiting area and traffic flow area to encourage use.





Signage

Recommended editable signage for each organization is available [here†](#). See examples below.

[Bilingual Public Health Signage](#) (Sourced from Toronto Public Health)

COVID-19 RAPID SCREENING CENTRE

Before entering ensure you:




-  Don't have symptoms
-  Are wearing a mask
-  Signed a waiver
-  Have an appointment

Food and beverages are not permitted in screening centre

How to set up an appointment

COVID-19 RAPID SCREENING CENTRE

Thank you for helping keep our team and families safe!

-  You will be contacted within 1 HR with the results
-  Please continue to stay 2m / 6ft apart
-  Please continue to wear a mask

5 - Communications and Registration

National Edition (last updated as of July 16, 2021)

Communications

Well planned communications are key for employee participation and satisfaction. When inviting employees to participate in the the program the following should be taken into consideration:

1. Initial communications - This can be done through email or a virtual meeting or combination of both.
2. Employees should be given time to review the provided information, ask questions and decide if they want to participate if the program isn't mandatory.
3. It is recommended to have a virtual information session where the project team can explain the pilot intent and process as well as allow employees to ask questions.
4. Leadership should be involved in all aspects of the communications process.

Initial Communications and Information Sessions

Recommendation is for the initial email/communication to be sent by the leadership team. You may choose to also include information regarding employees being paid by your organization and/or other government income-replacement benefits they may be eligible for, if they screen positive or have to quarantine due to being a close contact.

The intent of the initial communications is to provide detailed information to potential employee participants, allowing them to make an informed decision on whether they want to participate, and to provide them an opportunity to ask questions. This can be done through documentation and/or an Information Session.

The Air Canada Communications Plan† can be used as a guideline.

Below items are recommended to be included in the Information Session:

- [CDL RSC Program](#) background information and approach
- Overview of sharing of de-identified data with CDL for research purposes
- Why is this program important and why is your organization participating?
 - We want our employees to be safe at work and to keep their family safe and healthy
 - We want to help reopen the economy
 - As a consortium of organizations we can learn faster by sharing information
- Background context on CDL RSC

- Antigen Screening Pilot
 - (Organization) is participating in an Employer Antigen Screening Program, with support from Ministry of Health and partner ministries
 - Many other Canadian companies are participating including Scotiabank, Rogers and Air Canada
- Program Objective
 - To assess the value of the antigen tests as a screening tool to support employee safety and business continuity in the workplace.
 - To support organizations in providing COVID-19 antigen screening of asymptomatic employees in a range of settings. Results from this program will support an increased understanding of how rapid antigen testing could be deployed more broadly to support provincial COVID-19 response activities.
- What is Rapid Antigen Screening?
 - An antigen test is a type of test that runs a liquid sample along a surface with reactive molecules. The test detects fragments of proteins in the liquid and gives a positive or negative result similar to a pregnancy test.
 - Antigen tests are a lot cheaper and faster than a PCR lab based test. Results are provided in 15 - 20 minutes and are highly accurate.
- Infectiousness
 - Rapid antigen screens can detect infectiousness of COVID-19 in asymptomatic people in a matter of minutes helping to proactively identify at-risk cases, which in turn reduces the risk of further infection.
 - Antigen screening does not replace the lab-based PCR diagnostic testing administered at hospitals and assessment centres and participants who screen positive will need to get a PCR test to confirm that they have COVID-19.
- Key Screening Information
 - Voluntary/Mandatory
 - Asymptomatic
 - Continue with Health Questionnaire
 - 2 times/week (72 hours apart, 48 if needed)

- Rapid Antigen test - 5 minutes to administer and 15-20 minutes for results
- Screen name and manufacturer
- Collection method (ie. swab type - nasal and not nasopharyngeal)
- Paid time off if employee screens positive & tests positive in confirmatory PCR test
- Paid time off if employee is a close contact of someone that screened positive & tests positive in confirmatory PCR test
- Key dates
 - Employee information sessions
 - Registration/Download app and signup for Screening time/dates
 - Program start date
- What's changing and what's staying the same?
 - Changing
 - Additional safety screening through a rapid antigen test administered onsite or at home
 - Approximately 5 minutes, 2 times per week
 - Staying the same
 - Health Questionnaire
 - Public Health procedures - hand hygiene, respiratory etiquette and face masks
 - Physical distancing
 - Staying home and self-isolating if you have one or more symptoms
- What's in it for me?
 - The rapid screening program will provide an additional layer of knowledge and comfort for our employees working from the workplace regularly and their families.
- What do I need to commit to?
 - Employees will need to make a commitment to the following:

- 2x screening per week (and 72 hours apart)
- Share feedback with the Rapid Screening team.
- Take a PCR test if you screen positive in an antigen test
- Quarantine for minimum of 14 days if you test positive in a PCR test
- Notify their manager of any positive antigen or PCR test result

Registration and Mobile/Web App Sign Up

Mobile/Web Apps

Communications to employees should include the for them to sign up for the app. Your dashboard will be able to track who has signed up. The Consent Form is built into the app and doesn't need to be sent separately.

Registration - Excel

If an app isn't being used then send a registration email to the employees for them to sign up using MS Forms or Survey Monkey and also includes the Consent Form. See The following information should be collected for input into excel.

- First and last name
- Employee number
- Email address
- Phone number
- Primary workplace location (pull down list is ideal)
- Name and contact of manager

Consent Form

CDL RSC provides a Consent Form that organizations must have all participants sign prior to their first screen. A signed Consent Form is required in order to allow organizations to collect, use and disclose personal information of employees, vendors and guests, and to authorize the organization to:

- Conduct COVID-19 rapid antigen screens
- Share registration information and the result of the rapid antigen screen and if applicable, PCR test within your organization as required.
- Disclose certain registration information and screening data in a de-identified form to CDL RSC for the purpose of evaluating the effectiveness of the Covid-19 screens, create

benchmark reports and analysis and compare the efficacy of the use of the screens in the workplace and for CDL RSC to share aggregate information with the governments.

The most up-to-date version of the Consent Form (Rev B) is available [here](#) in the LOA . The Consent Form has been translated into a number of other languages as it is important that employees understand what they are consenting to, and this should also help with increasing participation. These are available from your CDL RSC Project Manager..

Organizations should review the form and edit the note-to-draft parts of the document prior to sending the form to participants to sign. Recommendation is for organizations to only add their own internal language in the note-to-draft sections. If necessary organizations may choose to supplement with their own form as it relates to the collection and retention of medical data internally.

Mandatory Rapid Screening Communications

Organizations may choose to have communications related to mandatory screening. The following documents can be used as a guideline for creating your own communications plan for mandatory screening.

Rogers Mandatory Rapid Screening Program†

MLSE Mandatory Rapid Screening Program FAQs†

6 - Screening Frequency & Booking Appointments

National Edition (last updated as of July 16, 2021)

To reduce the chain of transmission it is important to have the most amount of people screened regularly in the workplace. Public Health recommendation for screening frequency is every 72 hours or less, and it is important to keep to this schedule as much as possible. Testing more frequently than every 72 hours may be more convenient, and necessary if you have had positive cases of COVID-19 in your workplace

Based on employees being screened every 72 hours, the following table can be followed and shared with employees. At organizations where employees work weekends, screening may need to be provided seven days per week to accommodate everyone's schedules.

Day of First Screen	1st Option for Day of Second Screen	2nd Option for Day of Second Screen
Monday	Thursday	Wednesday or Friday
Tuesday	Friday	Thursday or Saturday
Wednesday	Saturday (if available)	Friday or Sunday (if available)
Thursday	Sunday (if available)	Saturday (if available) or Monday
Friday	Monday	Sunday (if available) or Tuesday

Communications

Key information to share with employees:

- Maintain 72 hours between screens as much as possible. If necessary, screenings can be done 48 hours apart or less. Screening 96 hours apart or more is not advisable.
- If a screen is missed, employees should be encouraged to be screened as soon as possible and shift their screening schedule based on the new screening day.
- If employees only come in once a week and can't commit to every 72 hours it is still better for them to be screened once a week than not at all.
- If employees only come in once a week and can't commit to every 72 hours it is still better for them to be screened once a week than not at all. This is also a good reason to implement @Home Screening so that these people can continue to be regularly screened.

Booking Appointments - Workplace Screening

Organizations will need to decide if they will require employees to book screening appointments or drop-ins or a combination of both. With the standard app, employees can easily sign up for appointments through the app and this can be done in advance or when they arrive for a drop-in appointment.

If using excel there are a number of options that can be used for scheduling appointments.

- Excel Sheet
 - Sufficient for small organizations but would be difficult to manage for medium or large pilots with 50 or more employees.
- Microsoft Bookings
 - Web-based booking signup system and calendar that integrates with Outlook and can be set up to send reminders to the participants.
 - Works well for small or medium size programs.
 - Difficult to use with large pilots with 100+ participants

7 - Ordering and Managing Screens

National Edition (last updated as of July 16, 2021)

Ordering Screens

The federal and provincial governments all have rapid antigen screens that they are providing to organizations at no cost. The process is different for each province and changes frequently and therefore the recommendation is to refer to the weekly cohort slide decks for more information and to fill out the [CDL RSC - Quick Start Form](#) for each location that screens are needed. This is another important area to speak to your CDL RSC Buddy organization and your CDL RSC Project Manager as they will be able to provide guidance. Screens will be shipped directly from the government to your organization.

Initial shipments should be based on the projected volume of screens needed for the first 10 weeks. Organizations can use the calculation below to determine the number of screens needed. Shipping lead times vary by province and speak to your PM regarding how far in advance you should order to ensure you have screens onsite in time to start your program. Subsequent shipments will follow the same process but quantity may vary depending on the amount of inventory your organization wants to have on hand.

Screen Quantity Calculation

(Number of program participants x 2 (times per week each person is screened)) x 10 (number of weeks you are ordering screens for) x 5% (spoilage, training and contingency) = total screens required

The recommendation is to order either the Abbott Panbio Nasal or the BD Veritor for screening in the workplace. If your employees will be screening at home, then please request the Abbott Panbio Nasal. The screens are similar in how they work but the BD Veritor uses an analyzer to read the cartridge and the Abbott Panbio doesn't require an analyzer.

Inventory Control

Inventory Control should be completed frequently to ensure that the project team never runs out of screens and supplies.

If your organization is implementing @Home Screening it is very important to have an Inventory Control process to ensure that employees are using their screens and not sharing with friends and family and therefore screens inventory should be tracked for each individual person.

Workplace Inventory Process

- Each morning check that all inventory needed for the day is available.
- At the end of the day update your Inventory Tracker with the current inventory available and check that the minimum inventory is on hand. If inventory is below the minimum required, place the order immediately.

- Once a week do a full inventory of all supplies and order any items that are below the weekly minimum.

@Home Screening Process

This image† shows the process flow that is used by Air Canada for their Inventory Control for @Home Screening.

There are two options for how screens are given to employees for @Home Screening.

1. Entire kit of screens -

1. For this option the entire kit of 25 screens is given to the employees for them to @Home Screen. If they are only screening 2x per week this would mean the kit would last them 12 weeks.
2. For this process it is important to note that the positive and negative control swabs should be removed from the kit before giving to the employee. The positive control swab is non-infectious but is required to go into biohazard waste. At minimum the controls swabs for each lot should be processed as per the manufacturers recommendations and then placed in the biohazard waste. All other unprocessed positive control swabs should also go into biohazard waste. The unprocessed negative control swabs should go into the regular waste.

2. Create individual screen supply mini kits -

1. For this option you would make mini screen kits for employees that would be enough for a few weeks and would include all the items they would need. See image below.
2. For this process the tubes would have to be prefilled with the buffer solution. The buffer solution will last in the tubes for as long as the expiration date but ensure that the caps on both ends are securely fastened.
3. This† photo is an example of how mini kits can be made using ziplock bags.

For both of the above options it is recommended to include a “cheat sheet” for [@home screening steps](#) and reading results†.

8 - Training

National Edition (last updated as of July 16, 2021)

There are two parts to training for implementation of rapid screening in your workplace if you are using a Trained Professional, self-administration or @Home Screening.

1. Training the Trained Professional that will be performing any of the items below:
 1. Screen administration including swabbing program participants
 2. Supervise program participants self- administering screening
 3. Supervise virtual @Home screening
2. Training program participants to:
 1. Self-administered screen
 2. @Home screen (where permitted)

Trained Professional

The Trained Professional can be anyone currently employed by your organization, or you could hire someone new or use a 3rd party service provider. The following resources can be used for training the Trained Professional:

- Site Screening Assistant Hand Book - PDF†
- Site Screening Assistant Exam - PDF†
- Site Screening Assistant Consent Form - PDF†
- Site Screening Assistant App User Guide - PDF†
- Self Administration - Walkthrough video†
- Trained Professional General Responsibilities - PDF†
- Trained Professional - Training video†

In addition to these documents and videos, some provincial governments provide training information and video. See links below.

[British Columbia](#)

[Alberta](#)

[Ontario](#)

Self-Administration and @Home Screening Training

The following resources can be used for training employees how to @Home Screen

- @Home Screening Videos (don't use in your own app but can be used for guidance) - Training Videos†
- Steps for @Home Screening - 1 pager PDF†
- Steps for Workplace Self-Screening 2 page PDF†
- @Home Screening - Training video†
- Reading Results Cheat Sheet - PDF†
- Employee Journey for @Home Screening - PDF†

9 - Screening and Controls

National Edition (last updated as of July 16, 2021)

COVID-19 testing (screening), including antigen testing, must be performed using testing devices that have been authorized by Health Canada and testing should be conducted in compliance with provincial testing guidelines and applicable law. Each province has its own regulations and these change frequently. Recommendation is to refer to the weekly cohort slide decks and speak to your CDL RSC Buddy for guidance as well as ask questions on slack or directly to your PM for clarification.

Organizations should follow the screen manufacturers documentation and videos as shared below.

Panbio™ COVID-19 Ag Rapid Test Device

[Official Product Page](#) - Panbio™ COVID-19 Ag Rapid Test Device Nasal (25T) - CODE 41FK11

[Nasal Swab Test Procedure Animation](#)

[Nasal Swab Test Procedure Live Action](#)

BD Veritor™ System for Rapid Detection of SARS-CoV-2

[Official Product Page](#) - BD Veritor System for Rapid Detection of SARS-CoV-2 ([Resources](#))

[Nasal Swab Test Procedure Animation](#)

In addition to the above the following video created by CDL RSC organizations can be used as guidance.

- Air Canada† - workplace self-administration screening
- Rogers† - workplace HCP/TP screening
- Rogers† - @Home Screening

Controls

Each screening kit comes with both a positive and negative control swab. These swabs are an additional external validation that the screening devices are working correctly.

Controls provided in the screening kit should be used to:

- Verify administrator can perform test and interpret results correctly
- Ensure screens are working and performing correctly

It is recommended to run controls:

- With each new operator prior to testing on patient samples

- For each new lot. Lot numbers are printed on the side of the box and each lot includes many boxes.
- At periodic intervals - eg. perform controls process daily

Rogers has created resources for processing the quality control swabs that can be used as guidance.

- Video† - Quality Controls Process
- Written Instructions† - Quality Controls Process
- Quality Control Log†

Considerations

- Test devices are for single use only
- Only use dedicated swabs provided for sample collection.
- Adhere to instructions for use
- Always wear PPE including protective gloves when handling specimens
- Ensure the correct amount of buffer is added to extraction tube
- Treat all specimens as potentially infectious samples
- Discard all items into appropriate biohazard containers
- Do not mix components of test kits

Waiting For Results

Once the sample collection procedure has been completed, the employee will be asked to leave the testing station. The organization should decide if they want participants to wait in a designated Results Waiting Area or if the employee should return back to work to be notified of the results through the app/email/phone call.

Screening and waiting for results is often used where a negative screen is a requirement for entry (mandatory).

10 - Waste Management

National Edition (last updated as of July 16, 2021)

Your organization's Project Team is responsible for ensuring that waste removal protocols are in place for the program. Depending on the province/territory, biohazardous waste, garage and recycling services may all need to be planned for as part of your screening program.

Biohazardous Waste

Due to the volume of medical waste, and because of the collection of samples from participants, some provinces/territories require biohazardous waste collection services to be in place. The provinces of British Columbia and Nova Scotia don't require waste from used screens to go into biohazard waste collection and can instead go into the regular garbage waste.

The following should be taken into consideration for your program.

1. Treat all specimen participant samples as potentially biohazardous material. Extra buffer solution should also be placed in biohazard waste.
2. Each screening station needs to have its own bio hazardous waste container with a biohazard waste bag inside the container.
3. Sample collection and analysis doesn't include sharps and therefore a sharps biohazard waste container isn't required.
4. Bags and labels should follow local government regulation including label colour and universal biohazard symbol.
5. Service provider
 - Organizations should coordinate biohazardous waste collection and removal with a medical waste service provider company if they don't already partner with one. Examples of a biohazard waste removal company are [Stericycle](#), and [GIC](#).
 - The service provider will support organizations with providing labeled bags, labeled boxes/containers, storage and collection of biohazardous waste.

6. Storage

- The biohazard waste containers at each screening station should be checked daily by the cleaning team. If the bag is full it should be removed from the container in the screening station and moved to a secure area with a central biohazardous waste storage bin for temporary storage until the service provider comes to the organization for the regular scheduled pickup. A new bag should be placed in the biohazard waste container.
- Storage area should be secure and not accessible to the general public and not adjacent to medical supply storage areas or areas used for food preparation or consumption.
- Central storage should be marked with the universal biohazard symbol.

7. @Home Screening and Biohazard Waste

- All provinces allow used screens and remaining buffer solution to be placed in the regular household waste.

Garbage and Recycling

Each Screening Station should have a garbage and a recycling bin so that waste from screening participants can be put in the proper stream.

Daily Cleaning

Each Pilot Site should arrange for their cleaning service provider to clean the screening station at the end of each day. Between screens, the HCP or TP should disinfect all high-touch surfaces. After a positive screen the screening centre should be completely wiped down and sanitized before being used again. The following list are things to take into consideration regarding cleaning.

1. Daily Cleaning - Beginning of the day, between screens and end of the day
2. Cleaning after a positive result - thorough cleaning after a positive screen
3. Cleaning the analyzer (if applicable) - refer to manufacturer information

11 - Communicating Negative and Inconclusive Screen Results

National Edition (last updated as of July 16, 2021)

Once the screen administrator has received the screen results and recorded the information, they should immediately inform the employee of the results. If using an app, this is done automatically once the results are entered.

CDL RSC Excel Users

Retrieve employee contact information from your internal participant list and email them their screen results. Recommendation is to use the same communication method for both positive and negative results and therefore email is the best option. Below is the recommended info to include in the communication to the participant with a negative result. It is also possible to only communicate positive results, but this isn't a very good user experience and not advisable.

- Full name of employee
- Type of test - Antigen screening test for COVID-19
- Time and date of the screen
- Result of the screen
- Reminder - the screen result is not a diagnosis, and they must continue to employ public health measures such as physical distance, use a mask and practice good hand hygiene.
- Remind the employee that if they develop any symptoms to follow public health guidance and get tested at a provincial/local assessment centre.

@Home Screening

For employees that are @home screening there are two possible scenarios:

1. Mobile app - in this situation the employee will know their results first and are required to report the information in the app. The apps are set up to have standard communications once someone enters a negative result.
2. Non-app user - in this situation the employee will know their results first and are required to report the information in whatever format your organization is using for results reporting. Options include online survey (MS Forms or survey monkey) or an email to the project team or if virtually supervised, they will share the negative result verbally.

Inconclusive Results

If a screen shows an inconclusive result, it often means that the screen wasn't performed correctly and should be redone. Recommendation is to request the employee re-screen as quickly as possible. See Air Canada's template† for communicating an inconclusive screen result.

12 - Communicating Positive Results

National Edition (last updated as of July 16, 2021)

Once the screen administrator has received the screen results and recorded the information, they should immediately inform the employee of the results. This is especially important for positive results.

If using the app, the employee will receive the notification once the results are entered but it is recommended to contact the employee immediately after entering the results to ensure they have received the result information and to review the next steps with them.

In Person Communication

If a negative result is required for entry into your workplace and participants wait in a Waiting Area for results, communications will be done in person. Take the following into consideration:

- To maintain confidentiality, conversations must be in a private area where others cannot overhear
- Allow the participant to ask questions
- Follow up with an email - see below
- Determine who is to notify their manager

Phone Communication

1. Retrieve employee contact information from your internal participant list. Initially contact the participant through a phone call and then follow up with an email. See information below to include in the communications.

2. Phone call:

- Initial communication of a positive screen result should be through a phone call as this is a better experience for participants and gives them the opportunity to ask any questions.
- Phone calls should be made by someone on the project team.
- If the participant doesn't answer the phone, leave a message requesting the participant to call back. Do not leave a message with the positive results.
- To maintain confidentiality, calls must be placed from a private area where others cannot overhear the call.

Email Communication

Organization should have a template email ready to send to any employee that screens positive.

- Name of employee
- Type of test - Antigen screening test for COVID-19

- Time, date and result of the screen
- Reminder to continue to physically distance, use a mask, and use proper hand hygiene practices.
- If applicable, remind participant that they will continue to be paid during the time that they are self-isolating.
- If an organization doesn't provide paid sick leave, remind them that the Canadian federal government has provided the [Canada Recovery Sickness Benefit \(CRSB\)](#) for employees to receive \$450 after taxes per week, for up to four weeks. CRSB gives income support to employed and self-employed individuals who are unable to work because they are sick or need to self-isolate due to COVID-19 or have an underlying health condition that puts them at greater risk of getting Covid-19. Canadians that contact Covid-19 when traveling outside the country are not eligible for CRSB.

4. Next Steps

- Employee is to immediately collect their belongings and leave the workplace, ensuring they continue to physically distance, wear a mask, and practice proper hand hygiene. They should wipe down their desk before they leave.
- Employee to go straight home to begin self-isolating, and not make any stops on the way. If they took public transit to work, if possible, they should take a taxi or be driven home by a friend or family member using all precautions possible.
- Organization's internal process should be followed related to who should be notified and contact tracing.
- Employee to arrange for a PCR test with their local COVID-19 assessment centre within 24 hours of the positive screen.
- Employee should take all precautions possible to avoid contact with anyone they live with.
- Employee to notify all their close contacts so that they isolate as well.

5. Positive PCR result - Once employee receives a positive PCR test result, they are to do the following:

- Continue to follow the requirements of public health authorities:
 1. Isolate for a minimum of 14-days from positive antigen test date
AND
 2. fever, shortness of breath and chest pain have been gone for at least 3 days with no medication
AND

3. all other symptoms are improving before the employee can return to work, or such other requirements as may be recommended by applicable local public health authorities at the relevant time.
- Input the positive PCR result in the app or notify their organization's Rapid Screening project team that they have tested positive in a PCR test.
 - Public Health will perform contact tracing for personal contacts.
 - Close contacts of the employee to get PCR tested.

6. Negative PCR result - If employee receives a negative PCR test result, they are to do the following:

- If they have any symptoms, they should continue to follow Public Health requirements:
 1. Isolate for a minimum of 14-days from positive antigen test date
AND
 2. fever, shortness of breath and chest pain have been gone for at least 3 days with no medication
AND
 3. all other symptoms are improving before the employee can return to work, or such other requirements as may be recommended by applicable local public health authorities at the relevant time.
- Input the result in the app or notify their Rapid Screening project team that they have tested negative in a PCR test. The Rapid Screening team will record this information in the data collection system that is sent to CDL RSC weekly.
- If they don't have any symptoms, the organization should decide if they can return or still stay home for the remaining 14 days. If possible, they could also have another PCR test done.

7. FAQ - Include these Questions and Answers in the email to the participant that screen positive.

- Who is a Close Contact?
 - Anyone that the employee is living with or providing care for
 - Anyone that is within about 6 feet/2 meters for a prolonged (>15 minutes) period of time. The definition of close contact does not change unless full PPE (mask, safety glasses, shield, gown, gloves) is worn.
 - Barriers, such as plexiglass or masks, are used as a precautionary measure to reduce the risk of spread of the virus. Even with the use of barriers, the risk of

infection for individuals who are within close contact for a prolonged (>15 minutes) period of time still exists because of airborne transmission. And these contacts should self-isolate for 14-days.

- Can I return to the screening program after I have a positive PCR test?
 - Yes, you should definitely join/return to the antigen screening program after you test positive in a PCR test once you are able to return back to work. Shortly after you are symptom free, and you've completed the two week mandatory quarantine, then it is recommended that you return to the antigen screening program.
 - For PCR tests you could continue to test positive for multiple weeks after the mandatory quarantine since these tests are designed to detect the genetic material from the virus that could hang around long after you've recovered.
 - On the other hand, antigen screens only pick up an active infection and therefore after 2 weeks an antigen screen shouldn't indicate a positive result as you are no longer infectious. This is also the case for "long haulers" as these symptoms aren't an indication of infection.
 - If you screen positive on an antigen test after this period, this should indicate a new infection. If your provincial government requires a longer period of time this is possible but the earlier the better.

8. In addition, a template email is attached here† which can be modified for your organization.

Other Steps to Take After a Positive Result

The organization should be prepared to cooperate with their local public health unit in the event of a potential workplace exposure of COVID-19 or an outbreak investigation.

Organizations should conduct internal contact tracing for all employees that worked closely with the employee that screened positive.

Facilities team should be contacted immediately after the positive result so that appropriate cleaning of the workplace and the Screening Station can be conducted. Facilities contact information should be easily accessible in the screening station.

13 - Data Privacy and Consent

National Edition (last updated as of July 16, 2021)

Consent Form

All participants must consent to participation in the screening program and to the sharing of their de-identified data with the CDL RSC. Refer to [Communication and Registration](#) for more information on the Consent Form.

Data Privacy

The complete CDL RSC Privacy Policy can be found on our website ([link here](#)).

Data De-Identification and Aggregation

Data collected during the screening program should be de-identified, and select data elements should be aggregated, prior to sharing with CDL RSC Central Data Infrastructure.

The apps are set up to automatically share the de-identified data with the CDL RSC Central Data Infrastructure.

The CDL RSC Excel template is also set up to only share de-identified and aggregate data. Do not submit additional information.

The foundational principles of the outlined de-identification and aggregation process are:

- To ensure privacy and security of participants' personal information.
- To collect all relevant data elements necessary to assess the operational efficiency, efficacy and impact of the rapid screening program.
- To provide sufficiently granular data to meet reporting requirements of government organizations such as Provincial Health Authorities & Health Canada.

De-identification:

- Participant data that is collected by your organization will be stripped of personally identifiable information (e.g. name, contact information, age) prior to sharing with CDL RSC.
- Data will be de-identified by associating the information with a Unique ID (in lieu of identifiable participant information) assigned by your organization for the purposes of:
 - Monitoring the frequency and screen results of regularly screened participants throughout the screening program at a participating organization.
 - Linking self-reported PCR test results to the screening results of a participant.
- De-identification will occur in two-steps for the purpose of data privacy and operational efficacy.

- Step 1: Participants will be assigned a Unique ID by your organization's Project Team upon registration.
 - For 'CDL RSC Excel Template' users: This process is to be explicitly defined and managed at the local screening site.
 - For 'CDL RSC App' users, this is done automatically upon registration as all participants are assigned a Globally Unique ID (GUID).
 - Screen administrators or Healthcare Professionals will record the screening results associated with only the Unique ID of the participant -- thus ensuring the privacy of personal health data at the pilot site.
 - The matching list, between Unique ID and personally identifiable information, is to be exclusively maintained and secured at your screening site level.
 - The matching list is never to be shared with CDL RSC for any purpose.
- Step 2: The Unique ID that is assigned during Step 1 is converted or 'hashed' to a new Unique ID prior to receipt by the CDL RSC.
 - This process is defined and managed by the CDL RSC Central Data Infrastructure (CDI) administrator.
 - The format of the new Unique ID will be consistent in the CDI for all data entries, regardless of the format of the pilot site assigned Unique ID.
 - This two-step process improves data privacy and security. Two separate matching lists, owned by two different organizations, are required for linking the de-identified data in the CDI with the corresponding personal information. Thus, a breach of the CDI-maintained list would not yield access to personal health information of participants.

Aggregation:

Aggregate data that is shared with the CDL RSC will not be sufficiently granular to enable identification of any of the organization's employees.

- In lieu of specific values that may be identifiable, aggregate values have been created:
 - Age → Age Range
 - Check-in Time & Screen Start Time → Check-in Length
 - Screen Start Time & Screen Reporting Time → Screen Length
 - Check-in Time & Screen Reporting Time → Total Turnaround Time

14 - Data Collection and Sharing

National Edition (last updated as of July 16, 2021)

Data Collection and Sharing

CDL RSC requires that the following data elements be collected from each participant during participation in the CDL RSC program:

For internal use by participant organization (not shared with CDL RSC):

- Full Name*
- Preferred Contact Method*
- Phone Number*
- Email Address*
- Check-in Time
- Screen Start Time
- Screen Reporting Time
- Other

De-identified Dataset (shared with CDL RSC):

- Organization Name*
- Screening Site Name*
- Screening Site Postal Code*
- Unique ID - Participant*
- Role Type*
- Age Range
- Participant Completed Pre-Screening Questionnaire*
- Participant Completed Consent Form**
- Screen at Home*
- Screen Date*

- Screen Type*
- Screen Result*
- PCR Test Date*
- PCR Test Result*
- Check-in Length
- Screen Length
- Total Turnaround Time

*Required field

** Participant organizations may also provide CDL RSC with information sufficient to validate participant consent (which may, in limited circumstances, include a copy of the completed consent form, such as in the event of a complaint or legal proceeding).

† Organizations can collect additional data elements that are not listed above. Such data elements and the purposes for which they are collected must be set out in the Consent Form.

Process

The process for collecting and sharing the above data elements consists of four key steps that are described below:

Step 1: Select a Data Collection Solution

	Excel Template (Detailed)	Enterprise App	Standard App
Solution Management	Template distributed by CDL RSC & managed by the participating Organization	Application is managed by your Organization's IT Team	Application is managed by Thrive Health
Customization	No customization	Unlimited customization	No customization for basic license - add-on turnkey modules available
Data ownership	Ownership & custody of the data (Organization privacy policy)	Ownership & custody of the data (Organization privacy policy)	Ownership of the data; custody by Thrive (PHIPA compliant)
Additional Considerations	Manual process, minimal data validation	Licensing Agreement with Microsoft	Software Agreement with Thrive Health

Standard App - Powered by Thrive (Recommended for organizations with >50 employees)

- Web based application
- Automatically assigns Globally Unique ID to participants for de-identification

- PHIPA compliant and in the process of achieving SOC 2 certification
- Hosted in Thrive Health's AWS environment
- Ability to manage various screening sites and locations
- Integrated scheduling system and communication
- Various customizations and support packages available to tailor your organization's experience
- No dedicated IT resources required

Enterprise App (Recommended for organizations with >50 employees)

- Built on Microsoft Power Apps
- Automatically assigns Globally Unique ID to participants for de-identification
- Option that allows for greatest organizational control over data privacy and security
- Ideal for scaling across many screening sites
- Integrated scheduling system and communications
- Can be deployed to participant organization's internal Azure environment
- Power Apps Licences required for each program participant
- Requires ~60 hours of IT development hours to complete set-up

CDL RSC Excel Template (Only recommended for organizations with <50 employees)

- Built in Microsoft Excel
- Minimal set-up required
- Manual participant registration process required
- Manual data entry required
- Manual upload of .csv file to web-portal is required for reporting
 - Manual assignment of Unique ID to participants is required for de-identification
 - Manual password protection of the CDL RSC Excel Template immediately after downloading it

- Must store the CDL RSC Excel Template in a secure location, following your organization's best practices.

Step 2: Collect Data from Screening Program Participants

The data collection process consists of the following parts:

1. Participant Registration
2. Participant Consent, Attestation & Scheduling
3. Participant Check-In & Screening including self administration and @Home screening
4. Results Entry & Communication
5. Entry of PCR Test Results (if applicable)

CDL RSC Excel Template (Only recommended for organizations with <50 employees)

1. Standard template as shared by CDL RSC needs to be filled by the organization
2. The updated sheet in .csv format needs to be uploaded via SFTP

The detailed process for each part differs depending on the Data Collection Solution that your organization has selected:

If Using the Enterprise App:

- All participants can register in advance or walk-in for participation in the screening program.
- QR code on a mobile device or a printed QR code number can be used during Check-In.
- Any customization of the described work flow would require internal IT resources and be the sole responsibility of the participating organization.

If Using the Standard (Thrive) app:

- Participants may register in advance of participation in the screening program or as a walk-in on arrival at the screening site
- QR code on a mobile device, a printed QR code or an alphanumeric registration code can be used during Check-In.
- Any customization of the described work flow would incur additional costs and must be negotiated directly with Thrive Health

If Using the CDL RSC Excel Template:

- Access, storage and security of the CDL RSC Excel file used for data collection (containing Personal Health Information) must be managed following the best practices of the organization. This is the sole responsibility of the participating organization.
- Participant Registration must be defined by the participating organization.
- Customization of the CDL RSC Excel Template (e.g. adding columns) should only be done in the designated areas.
- Format and process for assigning the Unique ID to participants must be defined by the participating organization.
- A blank version of the CDL RSC Excel Sheet should be started at the beginning of each reporting period.

Step 3: Share Data with CDL RSC

Data collected as a part of the CDL RSC program must be shared with CDL RSC on a regularly scheduled basis. All data from the participating organizations will be de-identified or aggregated and used to assess the efficacy, efficiency and impact of the CDL RSC program.

Depending on your choice of data solution, the process of sharing data is defined below:

If Using the Enterprise App Solution:

- De-identified data is shared with CDL RSC on a daily basis.
- The required data elements from their Microsoft Dataverse are automatically sent to the CDL RSC Central Data Infrastructure via secure connection.

If Using the Standard App Solution:

- De-identified data is shared with CDL RSC on a daily basis.
- The required data elements from Thrive Health's AWS environment are automatically sent to the CDL RSC Central Data Infrastructure via secure connection

If Using the CDL RSC Excel Template:

- De-identified data is shared with the CDL RSC on a weekly basis (every Friday).
- Participants upload the required data as a .csv file to the CDL RSC Central Data Infrastructure via a secure web-portal.
- Instructions (to be completed at the end of each reporting period):
 - Navigate to the 'CDL RSC Reporting' tab in the CDL RSC Excel Template
 - Export tab 'CDL RSC Reporting' as a .csv file

- File -> 'Save As...' -> Select Secure Location -> Select File Format: 'Comma Separated Value (.csv)' -> 'Save' -> OK
- Open browser on secure internet connection and navigate to CDL RSC data submission web-portal.
- Log-in to web-portal and upload .csv file.
 - Select 'Upload File' -> navigate to secure location where .csv is stored and select file -> 'Select' -> 'Yes'
- Wait for confirmation that upload was successful.
- In case of upload errors, please contact info@cdlrapidscreeningconsortium.com
- Store the password protected CDL RSC Excel Sheet and exported .csv file in a secure location.

Step 4: Visualize Data

Both of the Apps provide the ability to report on the results of your program through dashboard views and other reporting/extract features.

These dashboards will allow you to visualize the data being collected by your organization and compare versus metrics shared through CDL RSC's Town Halls and other forums. Additionally, the data collected allows organizations to simplify mandatory reporting to government health authorities.

15 - Central Data Infrastructure

National Edition (last updated as of July 16, 2021)

CDL RSC collects de-identified data from each participating organization, as described in the section [Data Collection and Sharing](#). This data is stored in the CDL RSC Central Data Infrastructure (CDI) and used for the following purposes:

1. Centralization and tracking of information pertaining to the efficacy, operational efficiency, and impact of CDL RSC program.
2. Generation of aggregated visualizations and reports to share with appropriate Public, Provincial, and Federal Health Authorities.
3. Public Health research and analyses.
4. Generation of aggregated statistical reporting and creation of benchmarking reports and analysis to share with other participating organizations for the purposes of assessing and comparing the efficacy of the use of rapid antigen screens at the workplace.

Important Note: All data shared with the CDL RSC Central Data Infrastructure is de-identified and associated with a unique ID as in [Data Privacy and Consent](#).

Cybersecurity Protocols

The CDL RSC program recognizes data privacy and security as a top priority for CDL RSC and its member organizations. As such the cybersecurity protocols are in line with legal and regulatory requirements as well as industry standards and are outlined for your reference below.

Key Principles

As a Consortium, we have the following baseline cybersecurity requirements:

- Advanced Access Management - use of multi-factor authentication (MFA) and access logging
- Enhanced Application Security - automatic detection of malicious attacks on infrastructure
- Trusted Attack Simulation and routine security audits
- Data Encryption at all points throughout data transfer and storage process

Data Security Standards

- Azure Center for Internet Security (CIS) controls
- ISO 27000-1
- Canadian Federal Protected B (PBMM)
- Azure Security baseline 2.0

- SOC 2 Compliance (in progress)

Supplementary text S2: Survey

CDL Rapid Screening Consortium Experience Survey

Please complete the survey below before Friday, July 16 at 5pm ET to provide feedback about your experience in the **CDL Rapid Screening Consortium**.

1. Company Name *

Please select the option that best describes your feeling about the statements below.

(Respondents can choose: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strong disagree)

2. The CDL Rapid Screening Consortium enabled communication with Government and Public Health Authorities. *
3. I had access to all the information needed to set up and operate my screening site. *
4. When I was unsure what to do, I asked questions during the Weekly Operations Meetings. *
5. Screening at least 2 times weekly is vital to the CDL Rapid Screening Consortium's success. *
6. When I was unsure what to do, I relied on my Industry Partner/Buddy. *
7. I felt there was a strong sense of community within the CDL Rapid Screening Consortium. *
8. When I was unsure what to do, I relied on the CDL Rapid Screening Consortium resources such as the Playbook, Slack, & Standard Operating Procedures. *
9. The Weekly Operations Meetings & Bi-Weekly Town Halls were a good use of my time. *
10. I found the data system valuable (including Apps, Reporting, Dashboards). *
11. I would recommend the CDL Rapid Screening Consortium to other Organizations. *
12. Have you already done so? *

Responses can include:

- *Yes, I have recommended the CDL Rapid Screening Consortium to other Organizations.*
- *No, I have not recommended the CDL Rapid Screening Consortium to other Organizations.*

13. What is your overall satisfaction with the CDL Rapid Screening Consortium? *

(Respondents can choose: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strong disagree)

14. What was the most valuable aspect of the CDL Rapid Screening Consortium for your Organization?

Respondents answered via open textbox.

15. What are some words to describe the team atmosphere within the CDL Rapid Screening Consortium (including Organizations, Industry Partners/Buddies, Operations Team, Scientists/Advisors, Government)?

Respondents answered via open textbox.

16. Do you have any other comments or suggestions?

Respondents answered via open textbox.

Figure S1: Survey results

We sent a survey to all 163 individuals identified as project leads and operators representing the 141 active companies on the day the survey was sent (July 12, 2021). We received 116 responses from 94 different companies. For a response rate of 71% at the individual level and 67% at the company level.

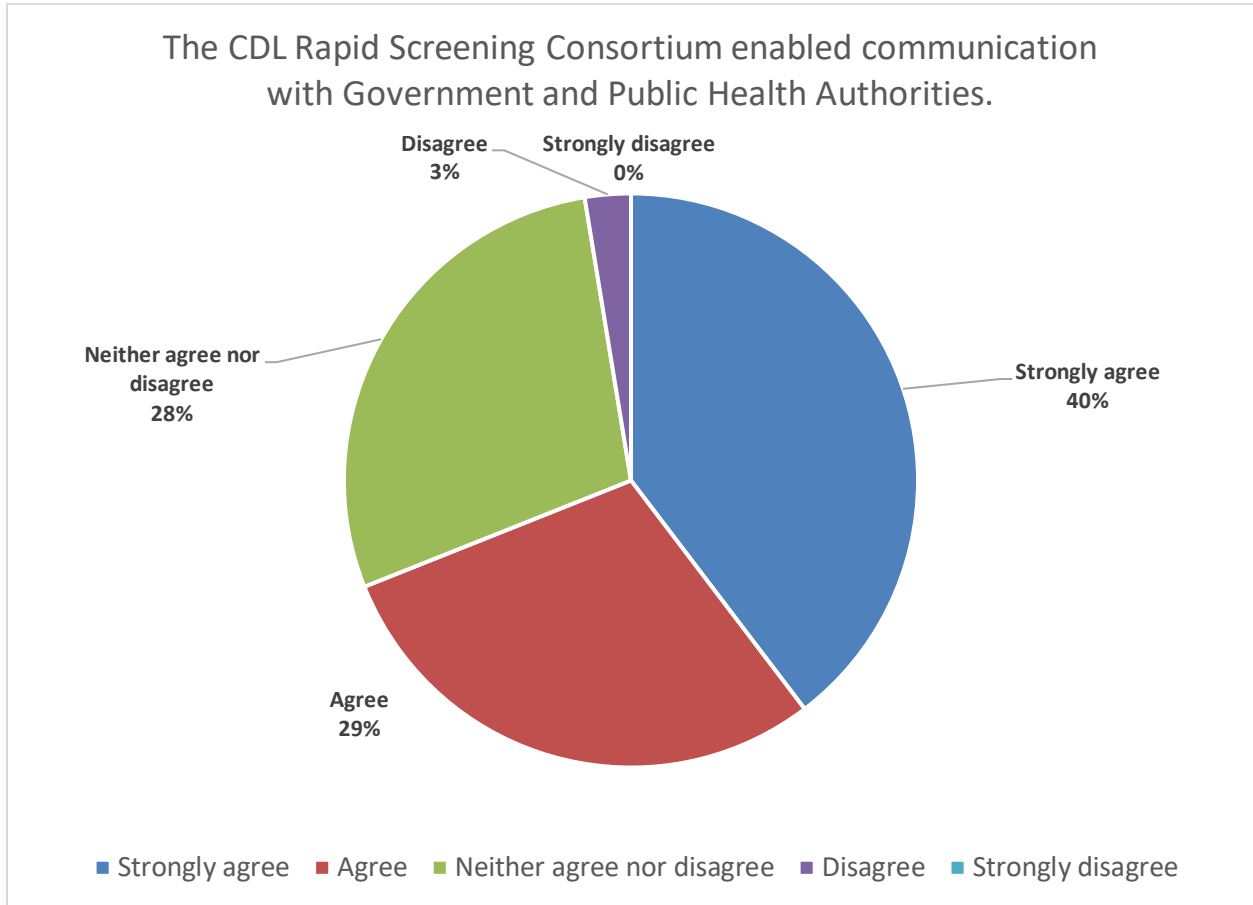


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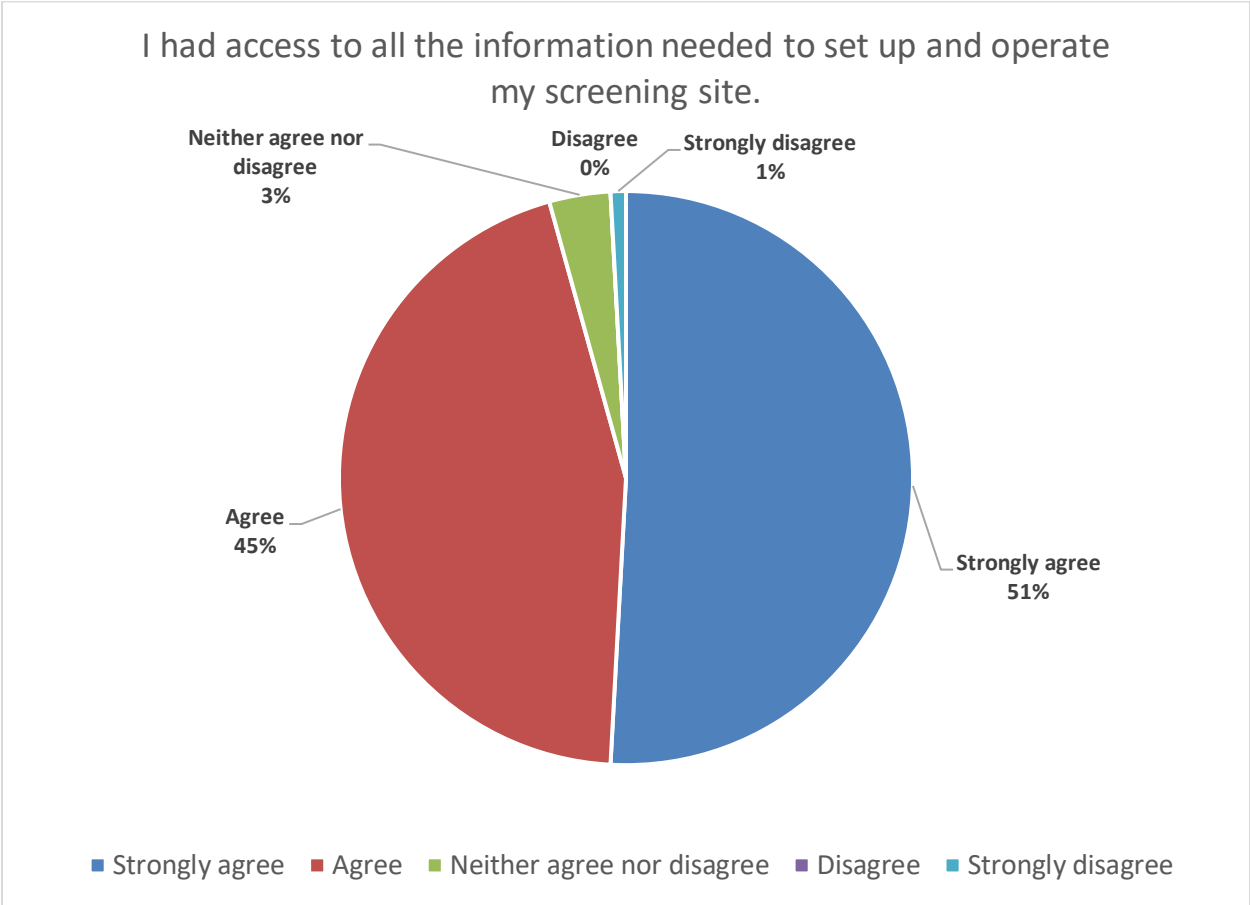


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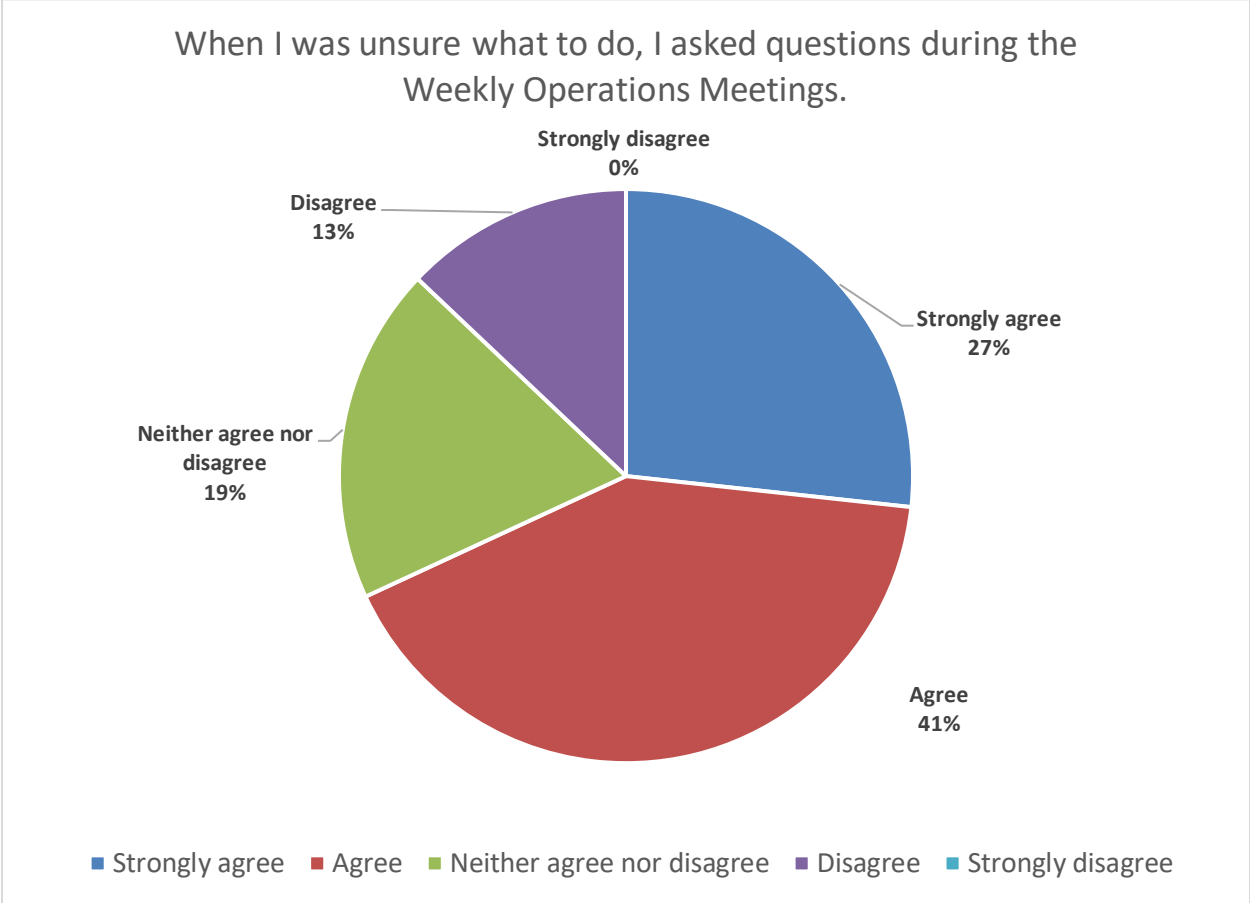


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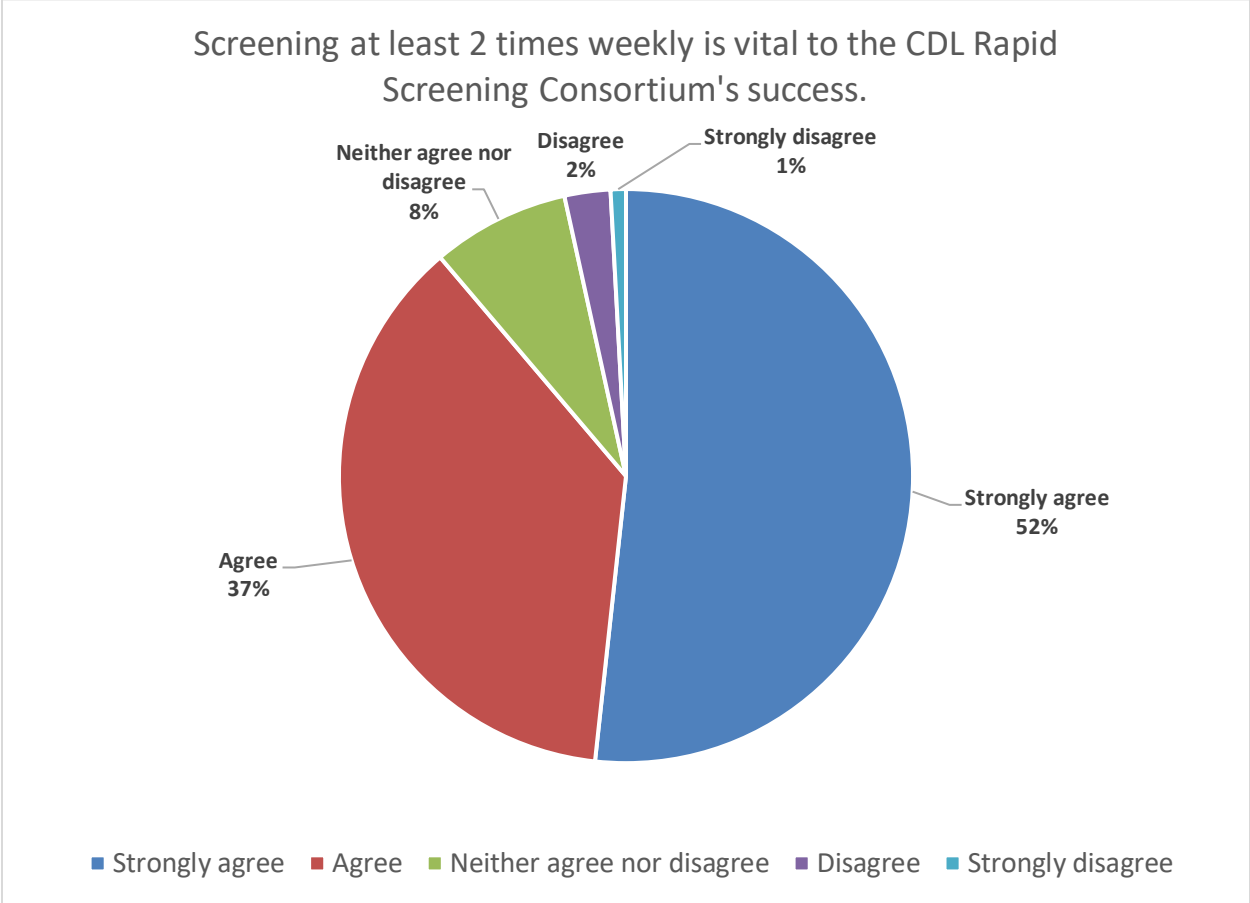


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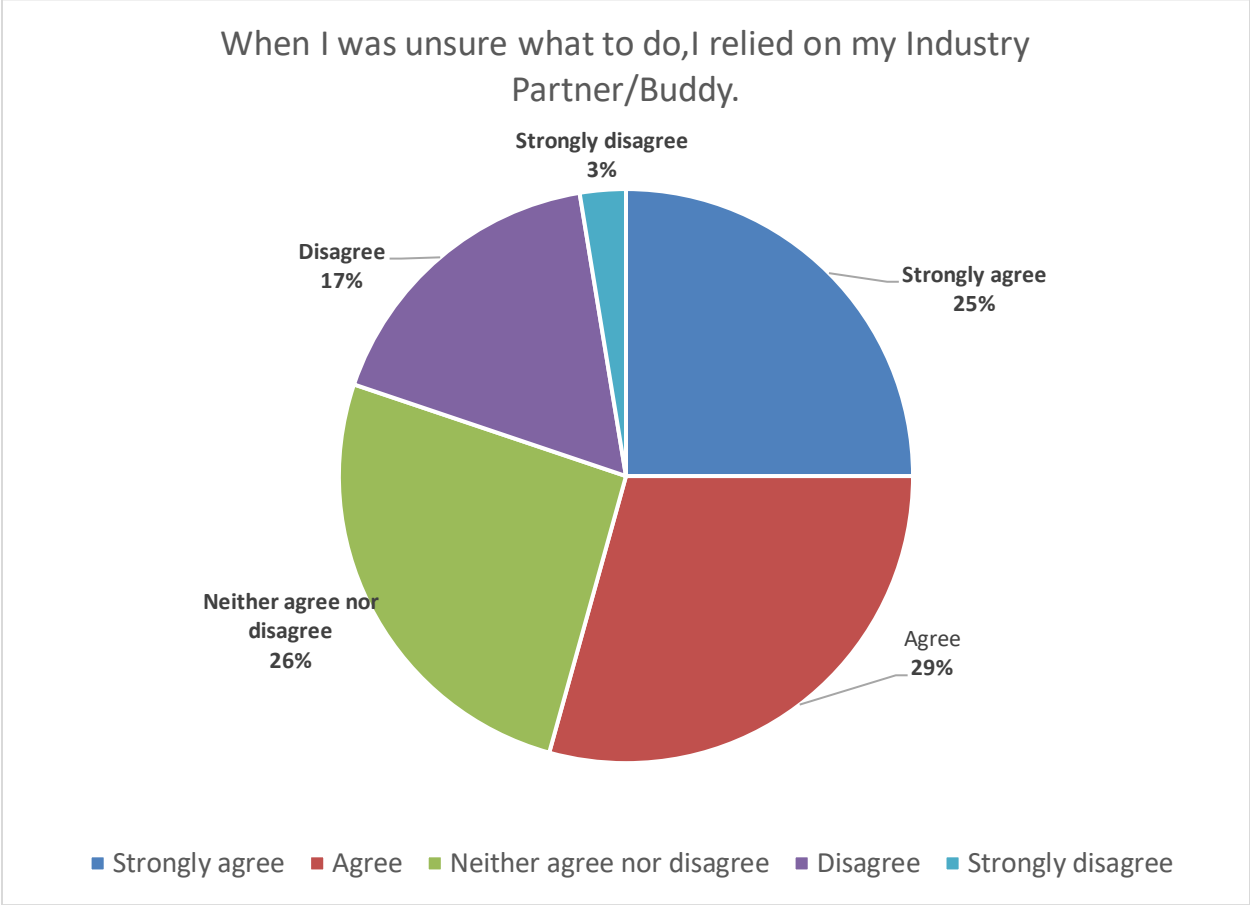


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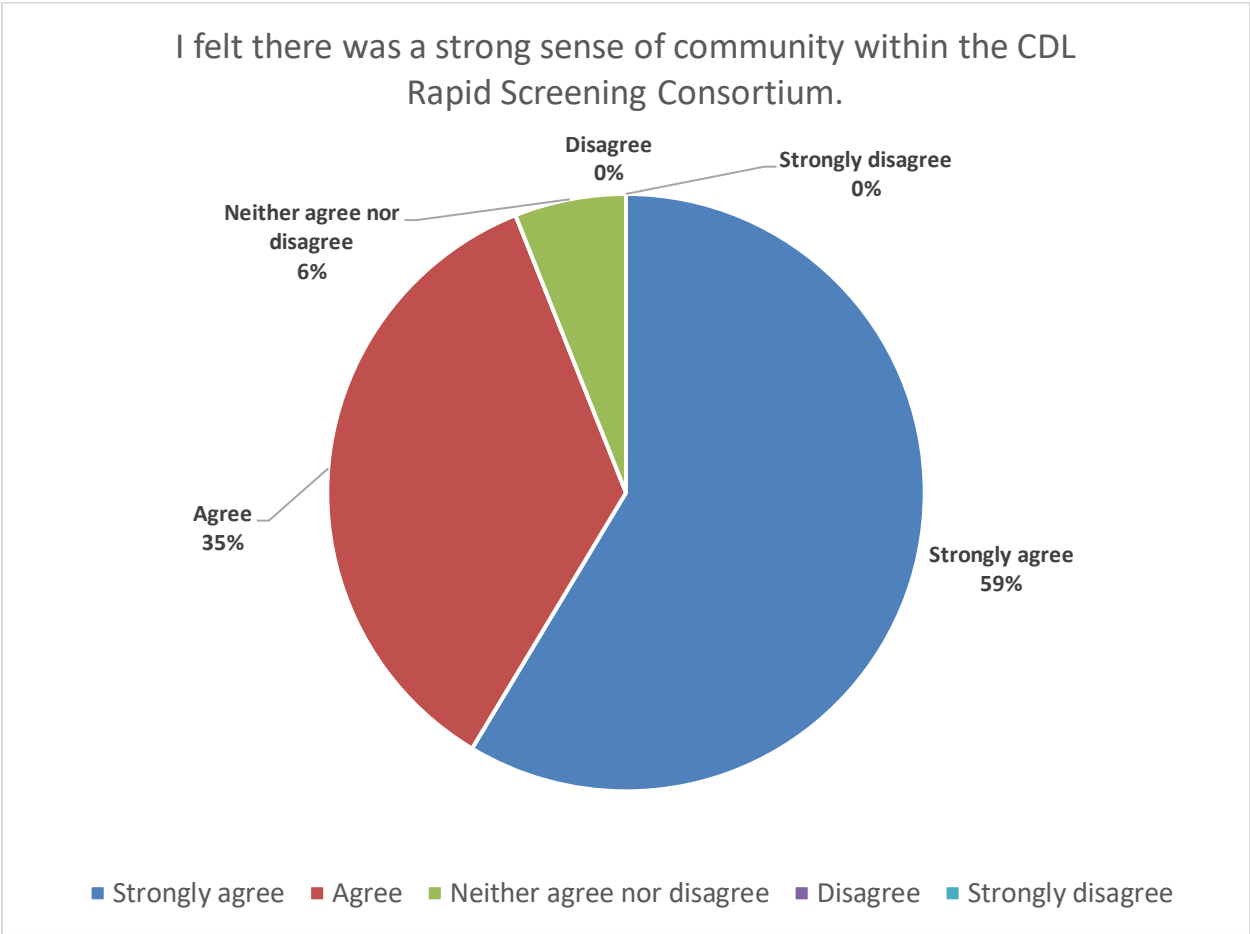


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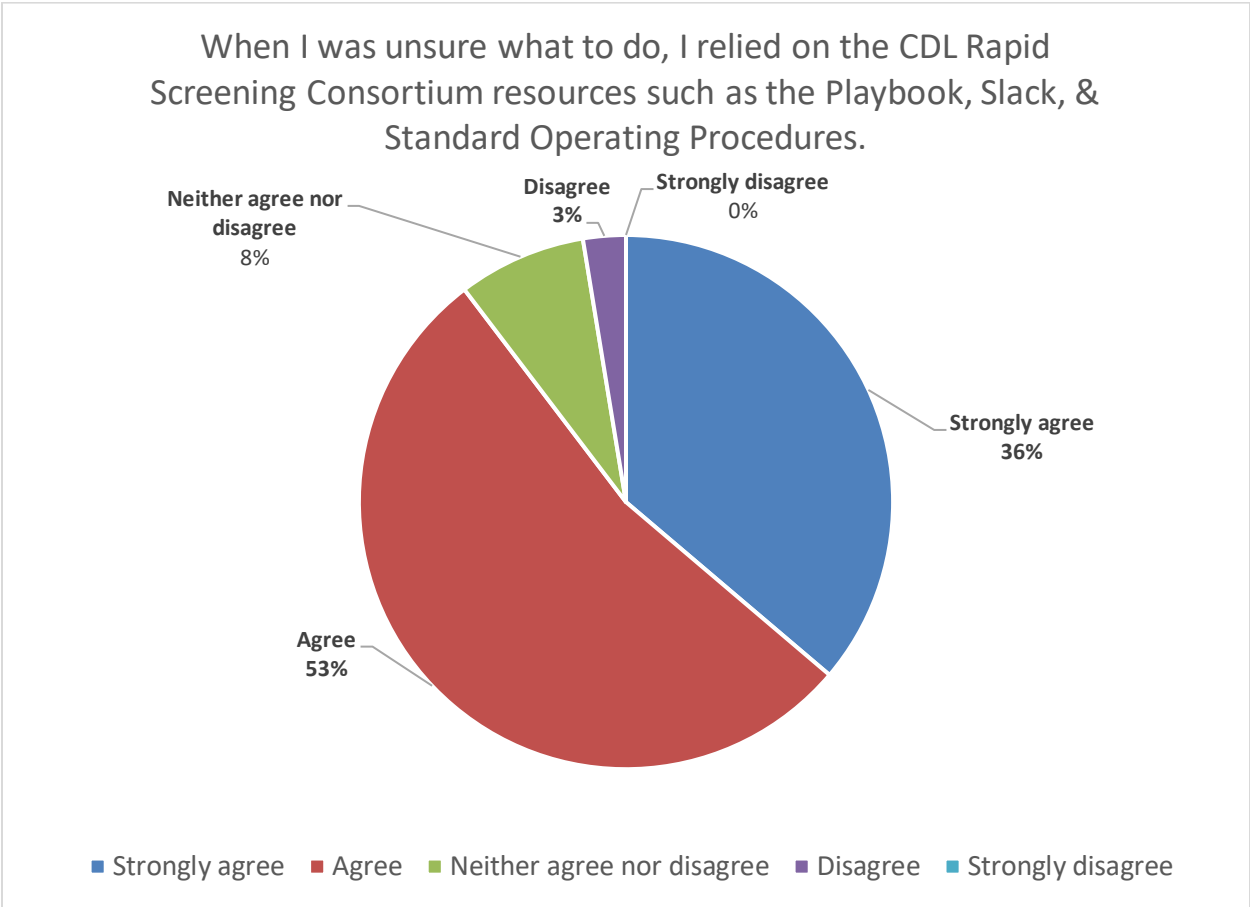


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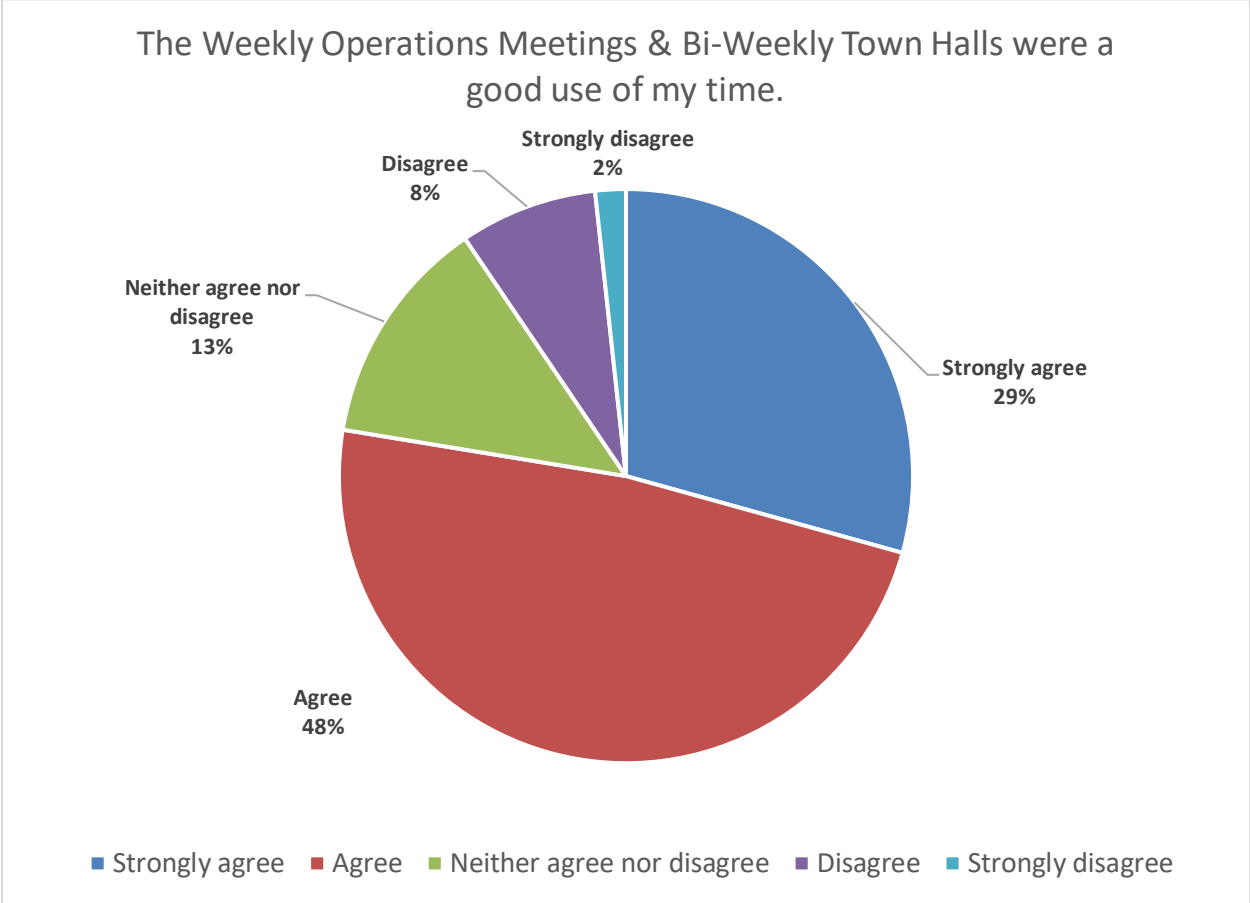


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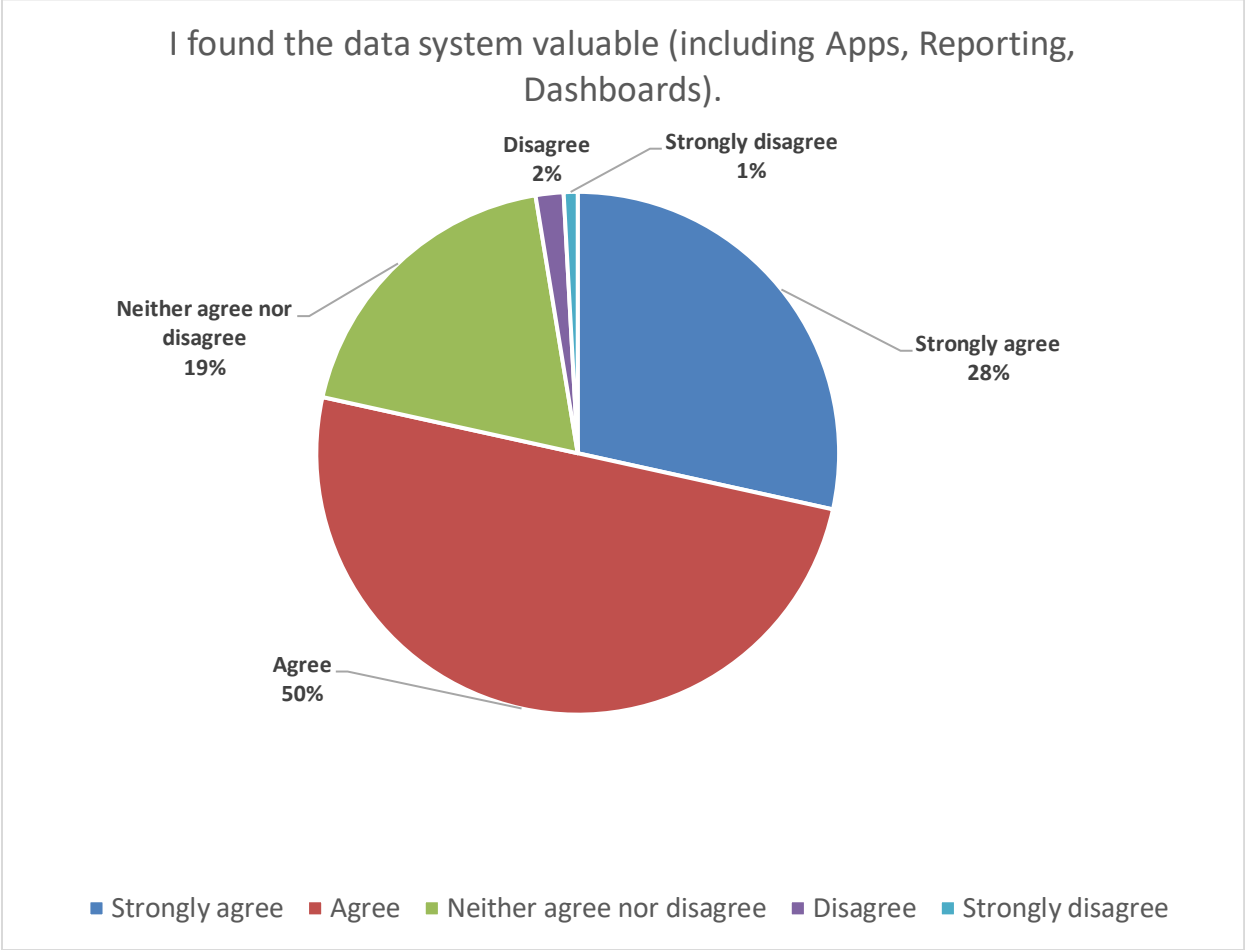


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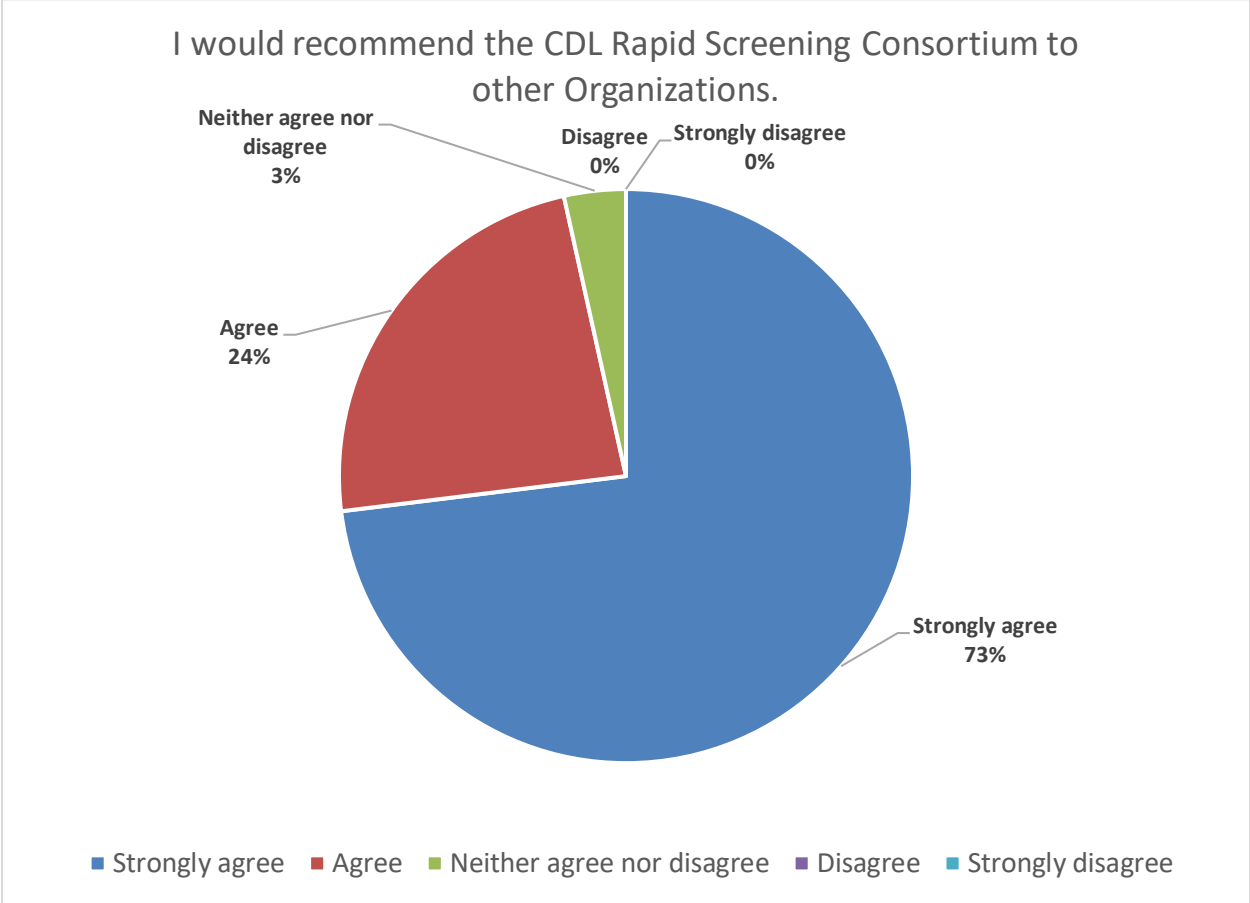


Table S1. Submitted employee testimonials on the screening program.

Type of Company	Type of Employee	Quotation (Feedback)
Transportation	Manager	<p>Screening twice weekly gives me the comfort that I am keeping myself and others safe.</p> <p>Screening on a frequent basis gives employees and their family the peace of mind in knowing they are reducing the risk of asymptomatic transmission of COVID-19 within the workplace. Breaking the chain of transmission means less people are off as a result of transmission or contact tracing and so supports maintain a stable and safe operation.</p>
Transportation	Customer Service Representative	<p>I was really nervous about being screened and had a great fear that I was asymptomatic and would test positive. Initially I felt that the results were not that accurate enough and would generate false positives and so therefore was not any benefit to me, but that was before I had all the hard facts.</p> <p>Covid-19 has created much fear and anxiety in everything we do and honestly felt my fear was holding me back. When I finally decided to participate, I was very nervous, but the management staff assigned to the project educated me on the benefits and accuracy and were most reassuring – regardless of outcome, you are providing protection for your family, friends and colleagues by helping to prevent the spread.</p>
Technology	Senior Leadership	<p>Participating in the rapid antigen screening gives me peace of mind when I return home to my family.</p> <p>It has allowed me to return to the workplace with confidence that I am keeping my family and my coworkers safe. I am proud to be supporting the CDL Rapid Screening Consortium in developing and improving the workplace rapid screening program and mentoring new companies.</p>
Technology	Technical Staff	<p>Participating in the rapid screening project makes me feel like I'm contributing to the solution of how we can re-open safely in the near term and that makes me feel good.</p> <p>It may be sometime before Covid-19 and its variants are reduced to manageable levels where it is safe to resume normal activities. The success of this rapid screening program is one way to return to a pseudo "normal" posture while still in the midst of the pandemic. In these trying times I'd like to think that I'm doing everything I can to protect myself, my family and my fellow coworkers by monitoring my Covid status through the rapid screening program.</p>
Technology	Technical Staff	<p>Creates a safer and healthier work environment for all employees! In addition, it's an added sense of comfort that I am not taking the virus home with me.</p> <p>[When I was getting screened, I felt a] small tickle in nose - no pain or uncomfortable sensation whatsoever. [I feel] fantastic about [my organization implementing the rapid screening system].</p>

Financial Services	Manager	<p>The mental relief of being able to do this is actually freeing. For all the protocols we have in place, this is the ultimate level of comfort.</p> <p>The process itself is incredibly easy and I cannot stress enough how non-invasive it is. You really don't feel a thing beyond a slight tickle at the base of your nose, if that! It really is incredibly simple; "rapid" is the right word for it! I can't express enough how amazing this initiative is, a great value-add in uncertain times. Such an easy process to go through that I don't understand why any organization wouldn't want to have it in place or why any person would not elect to participate.</p>
Financial Services	Manager	<p>We are so fortunate to have the opportunity to bring this program to our workplace and to be able to provide additional layer of safety and security to our frontline workers.</p> <p>The test was quick and easy, and not invasive at all. It is nothing similar to the standard PCR test. The rapid screening is an excellent initiative that creates a greater level of comfort and security while working in the workplace and when interacting with family members. The screening process takes less than 5 minutes and provides so many benefits on a personal and organizational level.</p>
Financial Services	Senior Leadership	<p>I have regularly been attending the office for a number of months and was very happy when we started the rapid screening process as this gave me a great deal of comfort around my own safety and that of my family.</p> <p>[My organization] has always had a strong culture of caring for our customers, communities and staff and I was very proud that we [participated in] these programs.</p>
Financial Services	Customer Service Representative	<p>As a commuter, knowing that I am going to be screened twice a week gives me and my family the peace of mind knowing I am able to keep my aunt and the rest of my family safe.</p> <p>As someone who has received a PCR test, when [my organization] announced that the Rapid Screening program was going to be available, I was a little apprehensive on participating. However, knowledge is power and the more I learned about the program, the more excited I was to start getting tested. I truly enjoy coming into the office and this provided the layer of comfort, safety and peace of mind I needed. The actual test only takes 30 seconds - it is easy to book an appointment, you get your results in 15 minutes and the test is painless.</p>
Financial Services	Technical Staff	<p>By participating in this pilot, I have felt confident that I am not at risk to my co-workers and others in the building. I am more productive in the workplace because knowing that I have negative results make me less anxious about COVID and I don't think of it as much on an ongoing basis.</p> <p>Physically, the process is not the least bit invasive. It is over in less than a minute. After the 1st time, you want to do it again in a couple of days. There may be a little bit of anxiety waiting for the result but that is a normal reaction that most people would have. Once the results hopefully come back negative, it is a euphoric relief.</p>

Retail	Manager	<p>It is important to be get people screened prior to working to help prevent the spread of the virus.</p> <p>Having a rapid screening system in place, even with lesser accuracy than a regular PCR test, would still help in combatting the spread of the virus. The test itself is non-invasive and only takes minutes to process.</p>
Retail	Manager	<p>The whole process was smooth and easy. I have since booked another test and will continue to do so for the safety and peace of mind, the results provide.</p> <p>I think it's a great idea and great tool to have at store level. It is hard to find time to go make appointments between work and home, so the fact you can come into work a few minutes early get the test done is a great thing. [Other people should get screened prior to entering their workplace] to keep colleagues in the workplace safe as well as their families at home. Gives employees peace of mind knowing they do not have COVID.</p>
Retail	Manager	<p>I think it makes everyone feel a little better that you are ok and it's so quick. You are keeping everyone safe too.</p> <p>I think it's great that the company implemented this to keep the colleagues safe. The swab did bring tears to my eyes. But it didn't last long and the test is so quick.</p>