Genomic eXpression

OPEN

HOW TO GET BACK TO WORK

In a Harvard Business Review article, it was reported that "all survey participants (95%) said that face-to-face meetings are essential to building long term business relationships

Genomic Expression is an RNA diagnostic company, offering a FDA EUA approved self collected COVID-19 PCR. We are here to assist you in making some key decisions on how you can reduce risk for businesses that are looking to get employees back to the office, or back on the road meeting customers.

There is a lot of information to digest, regulations to navigate and technologies to evaluate. In the bottom of this document we have included links to additional information.

HOW TO DETECT COVID-19

COVID-19 is an RNA virus. It spreads mostly by air where small drops can stay in the air for a prolonged time and travel up to 6 feet. The only way to detect an active infection is by using a PCR based test, which detects the RNA from the virus in the sample.

We entered into a collaboration with Yale University/ Saliva Direct to prove that saliva is just as effective a sample type as the nasopharyngeal (NP) swab test, which requires a healthcare worker to administer it.

Yale has been the key to keeping the NBA playing with this test, which has proven effective in detecting COVID-19 in *asymptomatic* individuals.

Most false negative test results are due to incorrect sample collection. After the sample is collected, it is sent to a lab for analysis. An antibody test using blood is useful to detect if the person has been exposed to the virus, but doesn't detect active infections. It can take up to a week to develop an antibody response.

Up to
25-80%
Of individuals may be asymptomatic carries

A history of SARS-CoV-2 (COVID-19) does not guarantee immunity from future infection
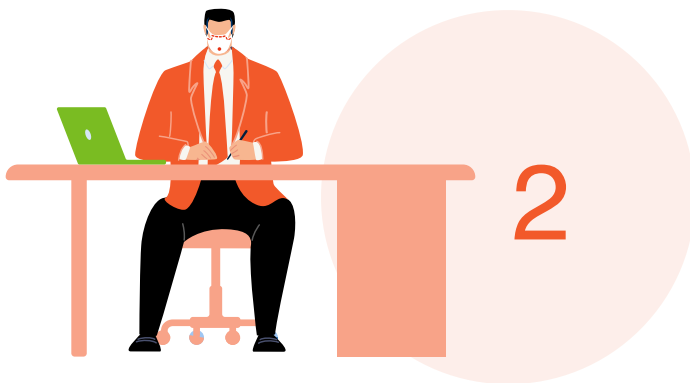
Symptoms can take from
2-14 DAYS
to appear

HOW TO REDUCE THE RISK OF INFECTION IN THE WORKPLACE

There are 2 main types of risk-reduction efforts in the workplace

EFFORTS DESIGNED TO KEEP INFECTED INDIVIDUALS OUT

1

2

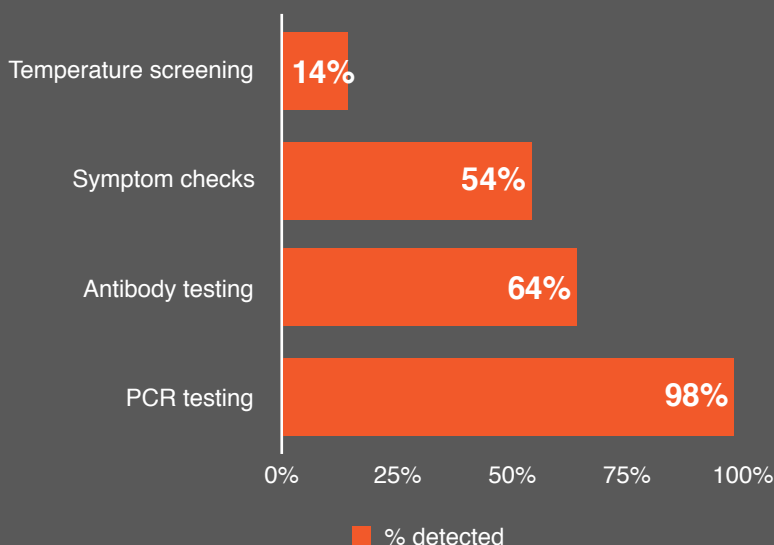## EFFORTS TO LIMIT THE SPREAD OF SARS-COV-2 WITHIN THE WORKPLACE

There are published scientific literature and data on testing accuracy that can inform workplace interventions, since the primary question is: What works in identifying who is infected?
These two efforts should be used in conjunction with one another as part of an optimal workplace risk-reduction strategy.

1

Keeping infected individuals out of the workplace

Below is a list of the effectiveness of various ways to detect if individuals are infected[1]

PCR Testing detects 98% of active infections

	% detected
Temperature screening	14%
Symptom checks	54%
Antibody testing	64%
PCR testing	98%

0%   25%   50%   75%   100%

■ % detected

The only way to make sure your employees are not infected is by testing using PCR, which is very sensitive. Between 25% and 80% of infected are asymptomatic (1).

It can be helpful to understand if the employee has had the virus by combining the PCR test with the antibody test.

At this point it is unclear how effective antibodies are in preventing a future infection and the antibodies clear quickly especially in asymptomatic patients making it difficult to conclude anything based on this type of test (13).

LIMIT THE SPREAD OF SARS-COV-2 WITHIN THE WORKPLACE

Promoting vaccinations among employees is an obvious way to decrease risk, however not all employees want to get vaccinated nor does vaccinations protect 100% against infections especially the new more virulent variants remains a concern. COVID-19 is an airborne disease. It can stay in the air after a sneeze or cough for a while, so make sure to have good air circulation and air filters. It can also survive for a prolonged period of time on surfaces, thus thorough cleaning, good hygiene and infection control practices should be implemented:

Wear masks at all times and mandate that your customers wear a mask too

Make sure employees stay home if they or their family members are sick

Reduce the number of people in the workplace and spacing out those who are there

Limit physical meeting sizes and the number of people in a room

Provide good air circulation and use updated air filters

Promote frequent and thorough hand washing

Enable social distance

Clean workspaces frequently and don't share space, equipment, desks unless they are thoroughly cleaned in between

Reduce non-essential traveling especially to places with high infection rates

OSHA suggest that you develop an Infectious Disease Preparedness and Response Plan, so you know what to do if one of your employees test positive. Such policies are key to reducing the spread within the work space. Key components of such a policy are:

- Prompt identification and isolation of potentially infectious individuals (see ref 10)
- Develop procedures for employees to report when they experience symptoms of COVID-19
- Recognize that workers with ill family members may need to stay home to care for them
- Enable tracking of all contacts between workers to isolate the outbreak should it happen
- Employees who have tested positive may only return to work after a 14-day quarantine and two negative PCR tests.

Not all workplaces are at the same risk of a COVID-19 outbreak. Obviously healthcare workers that work with COVID-19 patients are at the highest risk level, however they are also trained and wear PPE. For the rest of us, the risk equation includes variables such as how many and often the employee have contact with other people, and what risk level those contacts are. Million Patients Cured translates reported cases into a heat map of the USA which gives you a picture of where the outbreaks are located http://www.millionpatientscured.com

1 STAT News "Optimism, not evidence, is driving America's return-to-work strategy

# DESIGNING A RETURN TO OFFICE PROGRAM

Understand Government guidelines

Different states and countries mandates testing for specific types of employees. Some also mandates symptom screening and establishment of a Infectious Disease Preparedness and Response Plan. You will need to know these requirements prior to designing your return to work plan.

What kind of testing and how often?

Establishment of a "COVID-19 Disease Preparedness and Response Plan" includes how you bring employees safely back to work and how often you require testing and promote vaccinations. You also need to have plan for how you respond to any positive cases.
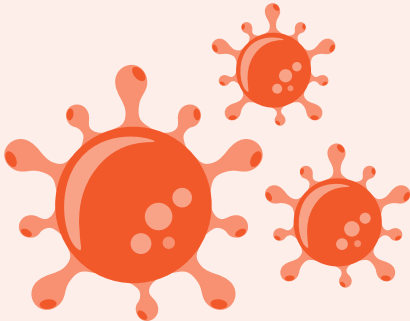
What is your company's level of risk?

Determine how much risk you and your employees are facing by understanding if they or their family members live in an outbreak area. Make sure you react in time when the risk changes.

Call 617 300 888 or email us at
COVID19@genomicexpression.com
Let us assist you in executing your work testing plan

Further reading

1) STAT News "Optimism, not evidence, is driving America's return-to-work strategy" https://www.statnews.com/2020/06/02/optimism-not-evidence-driving-americas-return-to-work-strategy/
2) The US needs to do 20 million tests a day to reopen safely, according to a new plan https://www.technologyreview.com/2020/04/20/1000228/the-us-will-need-to-do-20-million-tests-a-day-toreopen-safely/
3) What is COVID-19 and how does it spread https://time.com/5820118/coronavirus-questionsanswered
4) There's Only One Way to Get the U.S. Back to Work: Testing, Testing and More Testing https://time.com/5819831/coronavirus-testing-back-to-work/
5) To Get Back to Work, Companies Seek Coronavirus Tests for Workers https://www.wsj.com/articles/ to-get-back-to-work-companies-seek-coronavirus-tests-for-workers-11587375003
6) The CDC Guidelines "Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020" https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html
7) The OSHA COVID-19 guidance for more information on how to protect workers from potential exposures, according to their exposure risk https://www.osha.gov/Publications/OSHA3990.pdf
8) OSHA guidance for returning to work https://www.osha.gov/Publications/OSHA4045.pdf
9) NYS Guide for Reopening of retail businesses providing curbside and in-store pickup https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/CurbsideIn-StorePickupRetailShortGuidelines.pdf
10) NYS Sample COVID-19 Symptom Screening Questionnaire https://portal.311.nyc.gov/article/?kanumber=KA-03314
11) Free contract tracing class by John Hopkins https://www.coursera.org/learn/covid-19-contact-tracing?
12) Traveling By Air In The Time Of Covid https://www.forbes.com/sites/williamhaseltine/2020/06/16/travelling-by-air-in-the-time-of-covi/#5d328e4b4277
13) COVID-19 Antibodies Can Disappear After 2-3 Months, Study shows https://www.medscape.com/ viewarticle/932671?\
14) Coronavirus contract tracing: Woman infects 71 people in 60 seconds https://www.news.com.au/world/coronavirus/coronavirus-contract-tracing-woman-infects-71-people-in-60-seconds/news-story/1dc30aed0e1f33c9ca1a4bdeaba98920
15) Two Missouri hairstylists with coronavirus saw 140 clients in their salon, but no one got infected https://www.businessinsider.com/two-missouri-hairstylists-with-coronavirus-saw-140-clients-none-infected-2020-6
16) The value of face to face meetings by Harvard Business Review https://hbr.org/sponsored/2016/04/managing-across-distance-in-todays-economic-climate-the-value-of-face-to-face-communication