The Threat of COVID-19

INTRODUCTION

We are all likely familiar with the events listed on the following page. The lack of a proven treatment or cure for COVID-19 has led to the emergence of measures known as Nonpharmaceutical Interventions (NPIs) as the primary tool in the fight against COVID-19. With the rapid spread of this disease, the pace of change and the scale of the human and financial cost of this pandemic, it can be difficult for an individual or even a single organization to know what they can and should be doing to contribute to the fight. Yet we have learned that everyone has a role to play in limiting the spread of COVID-19. The ability of your organization to contribute is even greater. This report aims to provide you with practical tools to aid you in your organization’s efforts to flatten the curve.

AN INTRODUCTION TO BLACKLINE SAFETY

Blackline Safety is a global safety technology leader. We provide comprehensive live monitoring and wireless gas detection to help teams working in hazardous environments respond to emergencies in real-time and manage efficient evacuations. Our talented team of designers and engineers create and manufacture everything in-house, from wearable technology and personal gas detectors to cloud-hosted infrastructure and web-based interfaces for global industry.

We have created the world’s first turnkey, work-anywhere safety monitoring solution that offers 3G wireless, remote gas detection, a two-way speakerphone and live monitoring to meet the demanding safety challenges of organizations in over 200 countries. Our vision is to become the leading supplier of wireless gas detection products in the world, and to that end, we offer the broadest and most complete portfolio in the industry.
KEY TERMINOLOGY

**Closure of public places** Closing of public places where large groups of people typically gather such as schools, daycares, malls, libraries, playgrounds, etc.

**Contact tracing** The process of identifying the people and places that a sick individual may have been in contact with.

**Flatten the curve** The curve refers to the rate of growth in the number of cases over a period of time. The goal is to slow the growth in case numbers sufficiently to avoid overwhelming the capacity of the health care system to treat everyone who needs it.

**Isolation** Either an individual who has tested positive for COVID-19 or, in some countries, an individual who is showing any symptoms is isolated from others to prevent further potential spread.

**Lockdown and curfew** Either completely locking down cities, town, etc. where individuals are not allowed to leave their homes or the implementation of a curfew requiring individuals to be in their homes by a specified time. Countries such as China, Italy and Spain have implemented lockdowns to slow the spread.

**Social distancing** By maintaining six feet or two meters away from others every individual contributes to preventing the spread of the virus. Current medical consensus is that COVID-19 is primarily spread through water droplets from sneezing and coughing. These droplets fall to the ground within two meters of the person producing them.

**Super-spreader** An infected individual who infects more people than the average infected person.

**Voluntary home quarantine** Asking individuals to remain home and only leave their homes for necessary outings such as the grocery store, pharmacy, etc.

---

**TIMELINE OF EVENTS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Dec 2019</td>
<td>China reported a small number of pneumonia cases in Wuhan, China to the World Health Organization (WHO). This was later identified as the novel Coronavirus (COVID-19).</td>
</tr>
<tr>
<td>4 Jan 2020</td>
<td>WHO publicly reports the cluster of pneumonia cases with no deaths in Wuhan, China.</td>
</tr>
<tr>
<td>10 Jan 2020</td>
<td>First recorded case of COVID-19 outside China confirmed in Thailand.</td>
</tr>
<tr>
<td>20 Jan 2020</td>
<td>282 cases confirmed in four countries including China, Thailand, Japan and Korea.</td>
</tr>
<tr>
<td>26 Feb 2020</td>
<td>WHO issues new guidance for businesses and employers outlining ways to prevent the spread of COVID-19.</td>
</tr>
<tr>
<td>7 Mar 2020</td>
<td>100,000 cases of COVID-19 worldwide in more than 100 countries.</td>
</tr>
<tr>
<td>11 Mar 2020</td>
<td>COVID-19 is characterized as a pandemic by WHO.</td>
</tr>
<tr>
<td>13 Mar 2020</td>
<td>Europe becomes the epicenter of the pandemic with more cases and deaths than the rest of the world combined.</td>
</tr>
<tr>
<td>20 Mar 2020</td>
<td>Canada and the United States close its borders to non-essential travel for at least 30 days.</td>
</tr>
<tr>
<td>15 Apr 2020</td>
<td>Over 2 million cases of COVID-19 have been reported globally.</td>
</tr>
</tbody>
</table>
Combating COVID-19 with Contact Tracing

WHAT IS CONTACT TRACING?

Contact tracing is employed to understand and slow the rate of infection, discover and monitor potential cases, and introduce treatment and counselling procedures as soon as possible. Contact tracing is not new. It has been used in the management of numerous historical outbreaks, including smallpox, Ebola, STIs and more.

HOW IS CONTACT TRACING DONE?

Traditionally, interviews are conducted with public health officials. The goal is to determine where the sick person has been, when they were there, for how long, and who they were in contact with. Interviewers will rely on several memory aids to jog the individual’s memory as they are attempting to retrace a person’s complex movements over the past number of days or weeks. Some of the common tools used are bank transactions, text message and email history, work records and receipts. While these are useful to jog the patient’s memory, they leave significant potential gaps in the individual’s history.

TECHNOLOGY’S ROLE IN CONTACT TRACING

Given the emergence of location-enabled wearable technology, it should not be surprising that a person’s location history could be useful to improve the accuracy of contact tracing. One country that has had demonstrated success in using technology to aid in contact tracing is South Korea. One of the first countries outside of China to experience a significant outbreak, South Korea quickly brought it under control using digital contact tracing techniques, including the use of GPS and CCTV.

With significant surveillance technology already in place, South Korea was able to track each person with a confirmed case of COVID-19, determine who they had interacted with, and notify the public of all the recent movements of someone with a case of COVID-19. Combined with rapid large-scale testing, societal norms around mask-wearing and aggressive quarantining this led to South Korea successfully bringing the outbreak under control. While successful in South Korea and several other nations, privacy legislation prevents many governments from instituting such large-scale digital contact tracing. In this case, we must adapt our available technology to augment the traditional contact tracing techniques.
Connected Safety and Contact Tracing

CURRENT INITIATIVES IN CONNECTED SAFETY

Apple and Google are partnering to develop an app that will use Bluetooth technology to notify a user when they have been in contact with an individual who has voluntarily self-identified as being infected with COVID-19. This initiative by Apple and Google could ease the pressure placed on public health officials by automating the process of contact tracing for infected individuals. While the app has faced criticism regarding privacy concerns, it could prove to be important in the global push to flatten the curve.

As planned, this app does not address two requirements of businesses. First, the app will not be functional on sites where it is unsafe to carry a cell phone. Second, Apple and Google are proposing this as an “opt-in” tool, meaning that individuals will need to sign up for the service. Anyone who does not download the app will not be covered. Blackline’s technology bridges these gaps by integrating digital contact tracing technology into an intrinsically safe device that workers are already carrying and enabling businesses to make the use of this device mandatory during working hours.

MY COMPANY HAS A KNOWN OR SUSPECTED CASE OF COVID-19. OUR WORKERS ARE USING BLKLINE’S SAFETY PRODUCTS. WHAT CAN WE DO?

If your company is using Blackline Safety’s connected safety products, authorized administrators in your business have access to your workers’ location history. Blackline’s devices automatically report a worker’s location to our cloud-based online portal, Blackline Live. In the unfortunate event of an employee becoming infected with COVID-19, quick action on the part of your company can help slow the spread of COVID-19 and potentially save lives while limiting the impact of the event on your company’s ability to deliver its critical goods and services.

Blackline Safety offers two tools to assist businesses with contact tracing for known or suspected cases of COVID-19: Blackline Live History View, and Blackline Analytics Close Contact Report.

Tool #1: Blackline Live History View
This can be used as an additional memory aid tool when interviewing the person with COVID-19. Gather business documentation such as work orders and emails, have the worker review their credit card statements and text message history and review all this documentation alongside the location history provided in Blackline Live to retrace the worker’s steps. The World Health Organization currently estimates that the incubation period for COVID-19 is between 2 and 14 days. During this period, the worker may have been contagious. Review the past two weeks’ location history with the worker and document people and places they interacted with.

Tool #2: Blackline Analytics Close Contact Report
Coming soon to Blackline Analytics, this report will produce a list of all other Blackline device users the infected individual interacted with, allowing you to determine who else in your organization might be at risk of exposure. To access the report, navigate to Blackline Analytics from the menu of Blackline Live. Apply filters for the date range and device ID of the user who is known to have COVID-19. The report will generate a list of each contact that occurred with that user and indicate the location on a map. This is a strong indicator that the person in contact with the user is at risk of infection.
How can I manage workers' rights and privacy while conducting our close contact investigation?

It is important to recognize the privacy rights of your worker when conducting your close contact investigation. Make sure you comply with the privacy laws of your jurisdiction and your company's privacy policy. When discussing potential exposures with other employees or the public, do not reveal the identity of the employee with COVID-19. In many jurisdictions, public health authorities will inform people who may have been exposed without informing them of the source of the infection. This allows both your employee and the company to remain anonymous.

What actions should we take after conducting our close contact investigation?

First and foremost, contact the public health authority in your jurisdiction. Follow their direction to ensure public safety. Report the results of your investigation to the authorities. As a business, you may decide to take additional measures. Options at your disposal may include disinfecting locations visited by the person with COVID-19, monitoring the health of workers who had close contact with the infected person or even providing the worker with alternate work arrangements that limit their exposure to others in your company or the public. Ensure any action you take complies with local legislation.

How can we use Blackline's tools to be proactive and monitor proper social distancing between workers onsite?

The Blackline Analytics Close Contact Report features a heatmap that visualizes clusters of activity on the job site. You can then begin to understand why these close contacts are continually occurring in those areas, and begin to implement any necessary measures to limit close contact moving forward.

The Close Contact Report can also help you understand which employees have the most close contact with others, and measures can be taken to prevent those employees from exposing others in the event of their infection, especially if that individual is determined to be a super-spreader.

How can I manage workers' rights and privacy while conducting our close contact investigation?

It is important to recognize the privacy rights of your worker when conducting your close contact investigation. Make sure you comply with the privacy laws of your jurisdiction and your company’s privacy policy. When discussing potential exposures with other employees or the public, do not reveal the identity of the employee with COVID-19. In many jurisdictions, public health authorities will inform people who may have been exposed without informing them of the source of the infection. This allows both your employee and the company to remain anonymous.

What actions should we take after conducting our close contact investigation?

First and foremost, contact the public health authority in your jurisdiction. Follow their direction to ensure public safety. Report the results of your investigation to the authorities. As a business, you may decide to take additional measures. Options at your disposal may include disinfecting locations visited by the person with COVID-19, monitoring the health of workers who had close contact with the infected person or even providing the worker with alternate work arrangements that limit their exposure to others in your company or the public. Ensure any action you take complies with local legislation.
Conclusion

The fight against COVID-19 is an ever-changing landscape. Blackline's customers have demonstrated their commitment to risk mitigation and proactive health and safety through their investment in our technology. You can leverage the investment your company has made in safety to do your part in this fight keeping your workers safe through proper social distancing and contact tracing.

For more information, please email us at info@blacklinesafety.com
ADDITIONAL RESOURCES

COVID-19
CDC – Cleaning and Disinfecting Your Home
CDC – Frequently Asked Questions
CDC – How COVID-19 Spreads
Government of Canada – COVID-19 Symptom Self-Assessment Tool
Health Canada – COVID-19 Updates and Information
John Hopkins – Coronavirus Resource Center Map
MIT Medical – COVID-19 FAQ
University of Rochester – COVID-19 Terminology and Definitions
WHO – COVID-19 Courses and Information
WHO – COVID-19 Situation Reports

Blackline Safety
Blackline Live Safety Monitoring Portal
Cleaning and Disinfecting Your G7 Safety Wearable
Using the Maps Page