Facing Uncertainty: The Challenges of COVID-19 in the Workplace
Acknowledgements
The COVID-19 Workplace Commons and the information and insights provided in this report are only possible due to the generous time and talents of many individuals and organizations. In particular, we would like to thank members of ASU’s Decision Theater including Sri Kandala, Ramesh Gorantla, Erzhena Soktoeva, Ana Hernandez, DeAnn Fedyski and Jon Miller for their tireless work and dedication to this project. We would also like to thank Genya Dana and Cameron Fox from the World Economic Forum for partnering with us to create Workplace Commons, the Employer Survey and providing Employer Case Studies. Next, we truly appreciate the team from Ipsos for providing support with global survey deployment. We are grateful to Marcus Jones and Daniel Eckstrom from ASU’s College of Health Solutions for their help in creating the survey in Qualtrics. We thank Jonathan Kurka from the Biostats Core at ASU’s College of Health Solutions for assistance with data validation and quality control. To the ASU College of Health Solutions’ Marketing and Communications team, we value and appreciate all of your support and effort throughout this initiative. We would like to thank our colleagues at Arizona State University who leveraged their networks and partnerships to share the survey. Finally, we would like to thank Jonathan Quick, Andrew Sweet, Ashley Chang and Leah Perkinson at The Rockefeller Foundation for their insights and support throughout this project.

All views expressed are solely those of the authors.

Funding
This report was funded by The Rockefeller Foundation.

Disclosures
Mara G. Aspinall is an independent board member for the following companies: Abcam, Allscripts, Castle Biosciences, OraSure, BlueCross BlueShield Arizona and Strateos; and receives fees for serving as an advisor to Cepheid.

About ASU’s College of Health Solutions
The College of Health Solutions translates health research and discovery into practice and prepares students to address the challenges facing people to stay healthy, improve their health and manage chronic disease. We offer programs in biomedical informatics and biomedical diagnostics; kinesiology, sports and exercise science; health care delivery; nutrition; population health; and speech and hearing science. The college’s online master of science in biomedical diagnostics degree is the only program of its kind worldwide and is designed to address the role of diagnostics in research, clinical decision making and policy. Students, faculty and staff work together toward a common goal of improving health outcomes by optimizing health and human performance across the lifespan and addressing systems of health care and health needs of populations. Our graduates are uniquely prepared to make an impact in the health workforce and shift the focus of health from sickness to wellness. Visit chs.asu.edu to learn more about how we are reimagining the future of health.

About World Economic Forum
The World Economic Forum is the international organization for public-private cooperation. The Forum engages the foremost political, business, cultural and other leaders of society to shape global, regional and industry agendas. It was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland. It is independent, impartial and not tied to any special interests.

About The Rockefeller Foundation
The Rockefeller Foundation advances new frontiers of science, data, and innovation to solve global challenges related to health, food, power, and economic mobility. As a science-driven philanthropy focused on building collaborative relationships with partners and grantees, The Rockefeller Foundation seeks to inspire and foster large-scale human impact that promotes the well-being of humanity throughout the world by identifying and accelerating breakthrough solutions, ideas, and conversations. For more information, sign up for our newsletter at rockefellerfoundation.org and follow us on Twitter @RockefellerFdn.
In this year like no other, COVID-19 is living up to the worst of the worst expectations. The virus is aggressive, unrelenting and sneaky. Just when we start believing that we are returning to our normal lives, we lose control again with another surge in COVID-19 cases and deaths. At the time of this report, there are at least 55 million cases and more than 1.3 million deaths globally. The U.S. leads all countries in both COVID-19 cases (over 11 million) and deaths (over 250,000), and U.S. COVID-19 hospitalizations are at a new high. This surge, the United States’ third, is showing no signs of abating with seven straight days of a record number of new cases.

In response to the pandemic, Arizona State University convened a National COVID-19 Diagnostics Summit in May 2020 with diagnostic leaders who came together to identify problems and recommend immediate solutions. The Summit resulted in the creation of the ASU COVID-19 Diagnostics Commons (COVID-19 Commons) which consists of several initiatives, including the COVID-19 Testing Commons and COVID-19 Workplace Commons. Many Summit participants expressed their concern about the lack of information about how employers were responding to the pandemic and the restrictions imposed on their businesses. Companies made quick decisions to send employees home without a game plan to bring them back. To address these concerns, the Workplace Commons was born. It was designed with a clear goal — to democratize knowledge during this global pandemic by providing information on COVID-19 employer responses.

The Workplace Commons initiative features an innovative, interactive back-to-workplace data dashboard that enables access to anonymized global survey data completed by employers in 29 countries, 23 industry sectors, 1,125 companies and 1,141 facilities. Workplace Commons’ Facing Uncertainty: The Challenges of COVID-19 in the Workplace, provides employer data about the impact of the pandemic on six different types of pandemic-related workplace practices including testing, contact tracing, facilities safety, pandemic response, financial impact and pandemic preparedness. In addition, the Workplace Commons houses a number of employer case studies that provide practical insights into how employers around the world are responding to the pandemic. As the pandemic and employer responses continue to evolve, the Workplace Commons will be updated with results and findings from two additional survey deployments during 2021.
Moving Forward

Employers are essential to our full economic and social recovery. While the transition to working at home happened faster and more successfully than expected, going back to the workplace may be more difficult and will likely take a much slower path. The desire for workers to return to the workplace is one indicator of the opportunities and challenges to come with returning to work. According to employers in our survey, 66% of workers have a positive attitude, to greater and less degrees, towards returning to the workplace. That is a reason for optimism but 24% of workers are reluctant or don’t want to return to the workplace.

We hope that this report elucidates some of the challenges faced by companies today and helps benchmark current practices. Moving forward, we will continue to monitor how employers are facing the challenges of COVID-19. Over time, we expect to see a clearer picture of which strategies and approaches are most effective. With this and other data, we can and will take back control from this virus.

Methodology

The COVID-19 Workplace Commons - Keeping Workers Well survey was distributed to over 58,423 individuals representing more than 33,460 company and trade association leaders aged 18+ from 93 industry sectors residing in at least 29 countries on five continents. The survey was conducted online between July 27, 2020 and October 20, 2020 in English and approved by Arizona State University’s Institutional Review Board (IRB). The survey contained 115 questions within seven broad categories including facility/company location and industry sector, testing, contact tracing, facility safety, pandemic response, financial impact and pandemic preparedness. Respondents were informed that their participation would remain confidential and were given the ability to skip any question within the survey. Ipsos, a global leader in market research, assisted with securing a majority of survey responses, resulting in 970 completions between September and October 2020 through the use of multiple panels across various industry sectors in English-speaking countries. Excluding responses with less than 80% completion rate, the survey resulted in 1,141 valid responses. Survey data were examined, including categorization of qualitative responses (e.g. ‘Other - please specify’) for the following: industry sector, reasons for companies not testing, main challenges of contact tracing, frequency of viral testing, where workers are being tested, factors for choosing testing providers, who receives positive results of employees, and where data about positive test cases are stored. ASU’s Decision Theater summarized results and the data featured on the COVID-19 Workplace Commons website dashboard represents valid responses.
Survey Overview

5 Continents | 23 Industries | 29 Countries | 1,125 Companies | 1,141 Facilities

Top 5 types of facilities in rank order [left to right]

Office Work | Light Manufacturing | Distribution / Warehouse | Hospitality / Entertainment | Data Center / Tech Services

Top 10 industries represented in rank order

Business + Professional Services (Accounting, Brokers, Corporate Banking, Legal, etc.) | Consumer Retail Services | Technology and Software | Non-profit Organization | Manufacturing | Construction | Retail Stores (Malls, Clothing, Car Dealerships, etc.) | Media + Entertainment | Healthcare, Hospitals, and Clinics | Agriculture + Food Production
Testing

A national testing strategy has not been implemented in the U.S. to date; however, it is clear that effective testing and screening for COVID-19 is necessary to contain outbreaks of the virus and decrease the number of cases and deaths related to COVID-19. The Rockefeller Foundation has called for a National COVID-19 Testing Action Plan in the U.S. to reduce the spread of the coronavirus.

The question is what role workplace based testing can and should play? Initially, this was our foundational question, but it became clear that at the time of data collection most employers were not ready to take on the responsibility of testing. Only 17% of the companies surveyed are testing their employees. For those employers who reported testing employees, roughly 60% of companies make testing mandatory. Of those companies that are testing, 44% are testing for both the virus and antibodies, 40% are testing for the virus only, 8% are testing for antibodies only, and 7% did not indicate the type of testing. The frequency of viral testing varies greatly with 19% testing daily, 37% weekly and the remainder, 44%, testing less frequently than that.

We also asked why companies are choosing not to test. The top three reasons are: #1 Too costly, #2 Too complicated to implement, #3 Too much concern about test accuracy.
<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too costly</td>
<td>28%</td>
</tr>
<tr>
<td>Too complicated to implement</td>
<td>22%</td>
</tr>
<tr>
<td>Concern about test accuracy</td>
<td>18%</td>
</tr>
<tr>
<td>Don’t believe it will help reduce infection</td>
<td>17%</td>
</tr>
<tr>
<td>Time to obtain test results</td>
<td>16%</td>
</tr>
<tr>
<td>Test availability</td>
<td>15%</td>
</tr>
<tr>
<td>Lack of knowledge or information</td>
<td>12%</td>
</tr>
<tr>
<td>Don’t understand options</td>
<td>11%</td>
</tr>
<tr>
<td>Worried about liability</td>
<td>10%</td>
</tr>
<tr>
<td>Worried about employee privacy</td>
<td>10%</td>
</tr>
<tr>
<td>Small workforce</td>
<td>8%</td>
</tr>
<tr>
<td>Not needed</td>
<td>6%</td>
</tr>
<tr>
<td>Concern about employee compliance</td>
<td>4%</td>
</tr>
<tr>
<td>Working remotely</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
<tr>
<td>Government testing</td>
<td>2%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>1%</td>
</tr>
<tr>
<td>Employees not experiencing symptoms</td>
<td>1%</td>
</tr>
<tr>
<td>Not available</td>
<td>1%</td>
</tr>
<tr>
<td>Currently closed</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Main reason companies do not test:** Too costly

**Uncertainty abounds:** 50% of respondents were uncertain about future plans for testing
Viral Testing

83% (160) Companies that test for viral infection

61% Companies with mandatory testing

56% Companies that test at least once a week

What was the most important factor in you choosing a testing provider?

- 38% Quality of tests
- 20% Test result turn around time
- 20% Government recommended
- 17% Test were available
- 3% Colleague recommended
- 1% Employee health provider
- 1% Location

How frequently are you performing viral testing?

- 19% Daily
- 37% Once a week
- 6% Every other week
- 12% Once a month
- 16% Only when symptomatic
- 6% One time only
- 4% Varied
# Viral vs. Antibody Testing

## What are the future plans for viral testing?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain testing at current levels</td>
<td>54%</td>
</tr>
<tr>
<td>Increase testing</td>
<td>34%</td>
</tr>
<tr>
<td>Not sure</td>
<td>7%</td>
</tr>
<tr>
<td>Reduce testing</td>
<td>4%</td>
</tr>
<tr>
<td>Stop testing</td>
<td>1%</td>
</tr>
</tbody>
</table>

## What are the future plans for antibody testing?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain testing at current level</td>
<td>45%</td>
</tr>
<tr>
<td>Increase testing</td>
<td>31%</td>
</tr>
<tr>
<td>Not sure</td>
<td>9%</td>
</tr>
<tr>
<td>Reduce testing</td>
<td>12%</td>
</tr>
<tr>
<td>Stop testing</td>
<td>3%</td>
</tr>
</tbody>
</table>

## What are the consequences for lack of compliance if viral testing is mandatory?

- 2-week quarantine at home
- Change of work responsibilities
- Disciplinary action up to termination
- None
- There are no company testing requirements
- Other

## What are the consequences for lack of compliance if antibody testing is mandatory?

- 2-week quarantine at home
- Change of work responsibilities
- Disciplinary action up to termination
- None
- There are no company testing requirements
- Other

## Future plans for viral testing

<table>
<thead>
<tr>
<th>Plan</th>
<th>Percentage</th>
</tr>
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<tr>
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## Future plans for antibody testing

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<tr>
<td>Stop testing</td>
<td>1%</td>
</tr>
</tbody>
</table>
Viral vs. Antibody Testing

Viral

1:1
Direct to indirect cost ratio for viral tests

25%
% of workers that tested positive:

Where are your workers being tested?*

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>Health testing laboratory</td>
</tr>
<tr>
<td>36%</td>
<td>On site at our facility</td>
</tr>
<tr>
<td>24%</td>
<td>Local/regional hospital</td>
</tr>
<tr>
<td>24%</td>
<td>Pharmacy close to facility</td>
</tr>
<tr>
<td>12%</td>
<td>At home</td>
</tr>
<tr>
<td>10%</td>
<td>Academic or university site</td>
</tr>
<tr>
<td>2%</td>
<td>Other</td>
</tr>
<tr>
<td>2%</td>
<td>Clinic/health care provider</td>
</tr>
<tr>
<td>1%</td>
<td>Health department site</td>
</tr>
</tbody>
</table>

Who administers viral tests to your workers?

- Employees of pharmacy or hospital
- Internal / company medical workers
- Local public health authorities
- Third party contractors hired for this task
- Other

Who pays for viral testing?

- Employees of pharmacy or hospital
- Internal / company medical workers
- Local public health authorities
- Third party contractors hired for this task
- Other

* Multiple responses are allowed
Antibody

1.25:1
Direct to indirect cost ratio for antibody tests

36%
% of workers that tested positive:

Where are your workers being tested?*

33% Health testing laboratory
31% On site at our facility
28% Local/regional hospital
24% Pharmacy close to facility
8% At home
10% Academic or university site
5% Other
22% Pharmacy close to facility

Who administers antibody tests to your workers?

- Employees of pharmacy or hospital
- Internal / company medical workers
- Local public health authorities
- Third party contractors hired for this task
- Other

Who pays for antibody testing?

- Employees of pharmacy or hospital
- Internal / company medical workers
- Local public health authorities
- Third party contractors hired for this task
- Other

* Multiple responses are allowed
Significant time and resources for emergency response planning and development of written plans has been a regular undertaking by employers and governments worldwide for decades. We therefore found it surprising that only 36% of businesses report having a formal disaster or emergency response plan in place pre-COVID-19. For those with a plan in place, a large majority (81%) had a fire emergency response plan with only 39% having any type of epidemic / pandemic emergency plan. Among those with prior emergency preparedness plans, 47% identify those plans as mostly or very useful for responding to the COVID-19 pandemic.

While many may have forgotten that the world experienced five pandemics over the past one hundred years, we believe that no one will forget COVID-19 any time soon. As a result, we expect that many employers will develop robust pandemic / epidemic preparedness plans for the future.

The COVID-19 pandemic has resulted in immense economic disruption to individuals, employers, markets and society. The cost to the global economy due to the pandemic is estimated at $1 trillion for 2020 alone, and public companies that remain open reported new spending up to $1 billion related to employee pay and keeping their workforce and customers safe.

How are employers responding to the disruption of their businesses? By far, the action taken most often by employers is cutting personnel expenses. More specifically, the most common action is a reduction in workforce, either on a temporary (35% of companies) or permanent (28% of companies) basis. The next most common action is temporary (28%) or permanent (27%) hiring freezes followed by reducing hours for hourly workers who were still employed (29% temporary and 25% on a permanent basis). Cost reduction is necessary not only because of business interruptions, but also due to cost increases in business operations. The cost increases varied greatly across the surveyed companies. 26% of employers indicated that they have had an increase of 26% or more in monthly operating costs, excluding testing costs, due to the COVID-19 pandemic. The remaining 74% of companies are experiencing cost increases of less than 25%.
## Actions Taken

<table>
<thead>
<tr>
<th>Temporary Adjustments</th>
<th>Permanent Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>63% (714)</td>
<td>55% (625)</td>
</tr>
<tr>
<td>Companies that made</td>
<td>Companies that made</td>
</tr>
<tr>
<td>temporary adjustments</td>
<td>permanent adjustments</td>
</tr>
</tbody>
</table>

### What actions have you taken?*

<table>
<thead>
<tr>
<th>Temporary Adjustments</th>
<th>Permanent Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>35%</strong> Reduction in workforce</td>
<td><strong>19%</strong> Executive / management pay cuts</td>
</tr>
<tr>
<td><strong>28%</strong> Hiring freeze</td>
<td><strong>22%</strong> Furloughs</td>
</tr>
<tr>
<td><strong>29%</strong> Reduced hours for hourly workers</td>
<td><strong>17%</strong> Reduced internship opportunities</td>
</tr>
<tr>
<td><strong>13%</strong> Closure</td>
<td><strong>11%</strong> Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Temporary Adjustments</th>
<th>Permanent Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11%</strong> Rescinding job offers</td>
<td><strong>10%</strong> Increased internship opportunities</td>
</tr>
<tr>
<td><strong>13%</strong> Bonuses or other incentives</td>
<td><strong>4%</strong> Increased salary for non-management workers</td>
</tr>
<tr>
<td><strong>8%</strong> Reduced pay for non-management workers</td>
<td><strong>4%</strong> Increased hiring</td>
</tr>
<tr>
<td><strong>7%</strong> Changes in employee health benefits</td>
<td><strong>6%</strong> Increased salary for hourly workers</td>
</tr>
</tbody>
</table>

* Multiple responses are allowed

**Top adjustment made due to financial pressures:**
Reduction in workforce
Remote Work

43% (489) Companies that required workforce to work from home
76% Highest % of remote employees during pandemic
64% Current % of remote employees

What is the overall workforce’s opinion about returning back to the workplace?

- Want to return eventually: 38%
- Reluctant to return: 18%
- Return earlier than possible: 15%
- Want to return immediately: 13%
- No feedback: 10%
- Do not want to return: 6%

What sources of information are you using to inform your reopening plans?

- National health agencies (CDC, NHS, etc.): 28%
- Local / state / regional health agencies: 18%
- World Health Organization (WHO): 27%
- Networking with colleagues: 10%
- Media: 8%
- Trade / industry organizations: 7%
- Other: 2%

What milestones need to occur in order for you to return workforce to work onsite*

- Local decrease in cases: 47%
- Vaccine available: 47%
- When government allows: 30%
- When we have planned safety measures in place: 29%
- Testing protocols in place: 25%
- When health agency allows: 24%
- Other- please specify: 11%
- Predetermined time: 4%

* Multiple responses are allowed
Coming Back

Top 5 concerns for returning to work

1. 78% Personal health / higher risk for infection
2. 50% Safety at facility
3. 42% Childcare
4. 19% Transportation to facility
5. 9% Other

66% Positive attitude towards returning
24% Negative attitude towards returning

* After work  * Multiple responses are allowed
Facility Safety

As we learned how COVID-19 is transmitted, it became clear that employers needed to take precautions in their workplaces to keep their employees safe and healthy. Virtually all employers made some modifications to operating procedures and created new safety protocols to mitigate risk of virus spread for employees while working. According to a July 2020 conducted by the National Safety Council of U.S. based businesses with at least 250 employees, all eighteen industry sectors were investing in keeping their employees safe and healthy.11

U.S. employers indicated that they are enabling employees to more easily practice good hygiene, increasing frequency of cleaning and sanitation, providing PPE including face coverings and face shields, investing in ways to increase the ability of employees to work from home, encouraging physical distancing with visual reminders and signage in buildings and allowing non-essential workers to work remotely.11 The Workplace Commons global employer survey echoes many of these major findings. Our survey results indicate that 74% of employers are requiring their employees to wear masks while 26% of employers have a more restrictive visitor policy since COVID-19.

74%
Require masks for employees

What COVID related resources do companies provide to their employees?*

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand sanitizer</td>
<td>80%</td>
</tr>
<tr>
<td>Masks</td>
<td>76%</td>
</tr>
<tr>
<td>Gloves</td>
<td>41%</td>
</tr>
<tr>
<td>Work from home supplies</td>
<td>31%</td>
</tr>
<tr>
<td>Improved work spaces</td>
<td>29%</td>
</tr>
<tr>
<td>Other forms of PPE</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>

* Multiple responses are allowed

26%
More restrictive visitor policy post-COVID

Top 10 industries requiring masks

- 100% Recreation (Gyms, pools, fitness centers, etc.)
- 100% Retail food stores (Grocery, etc.)
- 93% Restaurants and food service
- 91% Education (Colleges & universities)
- 90% Healthcare, hospitals, clinics
- 90% Biotech, pharma & diagnostics
- 86% Non-profit organization
- 83% Manufacturing
- 82% Retail stores (Malls, clothing, car dealerships, etc.)
- 81% Technology and software
Contract tracing to reduce disease transmission is not a new phenomenon. The origin of contact tracing during disease outbreaks dates back to the 1854 cholera epidemic in London. John Snow hypothesized that the water from the Broad Street pump was contaminated, but it wasn’t until he went house to house collecting detailed information that he was then able to link the deaths to the Broad Street pump. Contact tracing along with the development of a vaccine led to the eradication of smallpox. Smallpox transmission required close face-to-face contact, so contact tracing enabled for close acquaintances to be identified, isolated and monitored.

Fast forward to today and COVID-19. The U.S. has failed to devise, fund and execute a national strategy for contact tracing. Employers, however, remain committed to trying to contact trace, at least within their own organization. 43% of companies who responded to the Workplace Commons survey report that they are performing some form of contact tracing, and of those, 58% say contact tracing is mandatory. While corporate liability is also acknowledged as a concern for employers conducting contact tracing, only 17% stated that they ask workers to sign liability waivers for contact tracing.

Unfortunately, contact tracing has not been as effective as hoped. Outside of the U.S., several other countries have more successfully implemented national contact tracing strategies, with either human or electronic tracing systems. Results have varied, but several countries have seen early diagnosis of COVID-19 and some reduction in virus transmission.
Contact Tracing Protocols

What requirements does COVID positive worker need to meet to return to workplace?

- **42%** (2-week quarantine at home)
- **21%** (two negative viral tests)
- **17%** (one negative viral test)
- **10%** (other)
- **10%** (no symptoms for a week)

What are the protocols for employees who might have come into contact with a positive person at work?

- **31%** (must self-quarantine without using vacation/sick days)
- **20%** (encouraged to self-quarantine using vacation/sick days)
- **18%** (encouraged to self-quarantine without using vacation/sick days)
- **16%** (testing)
- **14%** (must self-quarantine using vacation/sick days)

What types of company resources are given to workers who test positive or come in contact with someone who tests positive?

- **53%** (medical referral)
- **37%** (educational material)
- **9%** (other)
Endnotes

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