

Blueprint for a Healthy Return to Work

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Foreword

A note from Grand Rounds CEO Owen Tripp



Owen Tripp
Co-founder and CEO,
Grand Rounds

I hope that this finds you and your families safe and in good health.

The COVID-19 pandemic has resulted in an unprecedented global panic, with profound public health and economic impacts. Several weeks of data suggests social distancing and shelter-in-place orders helped to ‘flatten the curve’ and avoid catastrophic disease spread. As the public health situation transitions from acute response to sustained mitigation, employers grapple with how to facilitate a systematic business reopening while not reigniting the public health emergency in the process.

Efforts to reopen are greatly complicated by the lack of testing available to ensure that the workplace remains infection-free. A vaccine is likely 12 to 18 months away (or more), requiring employers to reopen with an overhang of uncertainty for a significant amount of time.

To that end, we want to offer a blueprint for a healthy return to work. We sense that there are lots of information sources but few planning frameworks. What follows is a resource that will help employers tactically prepare to return to work safely and productively.

Our deep dive through the following areas will offer a model for how to use deep epidemiological expertise and comprehensive data to inform which locations are safest to reopen, and how they should reopen:

1. Forecasting;
2. Testing and tracking;
3. Workplace attendance;
4. Workplace preparedness;
5. Navigation and administrative support;
6. Clinical response;
7. What comes next; and
8. Additional considerations

We hope that this blueprint can demystify the return to work planning process and provide a go-to resource to employers around the country. We welcome the opportunity to further discuss any of the topics covered in this blueprint.

Be well,

A simple, handwritten signature in black ink, consisting of a stylized 'O' and 'T'.

Owen

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1 Forecasting

Robust disease forecasting at the local level offers critical visibility and insight as HR teams comb through locations and select the worksites to reopen with the lowest risk of experiencing a follow-on outbreak. Disease forecasting can provide insight into the local geographies at the county level, such as COVID-19 infection peaks and hospital capacity, including the date at which hospitals will reach maximum capacity. That is the level of precision necessary for employers to decide whether to open now, in a few weeks or in a few months.

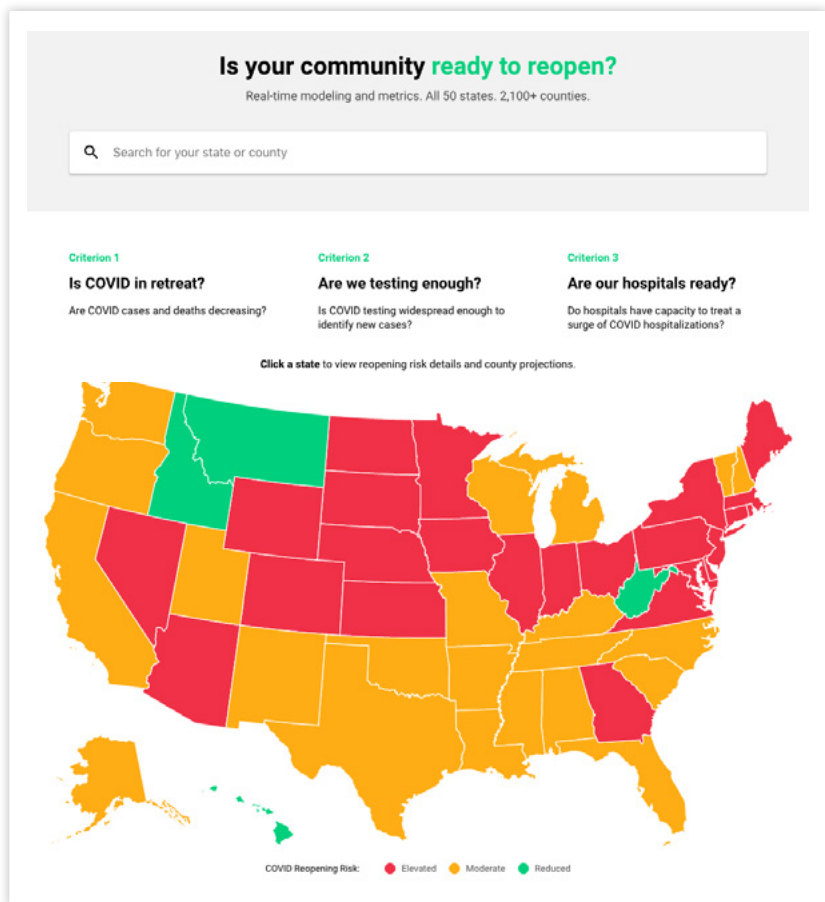


CHECKLIST
Forecasting

Employers should ensure that any disease forecasts used to inform reopening dates take the following county-level data into account:

- Infection rates
- Immunity rates
- Mortality rates
- Health policy (e.g. shelter in place)
- Risk profile of the broader population
- Risk profile of the onsite working population
- Hospital capacity levels
- (Near) Real-time data feeds

COVID Act Now, a collaboration amongst some of the top epidemiologists and data experts in the country, offers a significant amount of detailed data modeling at the county level and can be a useful resource as employers consider whether the local conditions are sufficiently low risk to allow for a worksite to reopen:



Source: [COVID Act Now](https://www.covidactnow.org/)



Live county-level disease forecasting models are available at covidactnow.org

Proper forecasting will enable employers to evaluate community-level conditions that can signal when it is appropriate to reopen a local worksite:

Disease trends	Healthcare capacity
<ul style="list-style-type: none"> <input type="checkbox"/> Decreasing numbers of cases in the context of stable or increased testing* <input type="checkbox"/> Decreasing numbers of hospitalizations* <input type="checkbox"/> Decreasing numbers of deaths 	<ul style="list-style-type: none"> <input type="checkbox"/> Adequate capacity in hospital, intensive care units, and ventilators <input type="checkbox"/> No field hospitals or emergency alternate care sites needed <input type="checkbox"/> Near normal wait times in emergency departments <input type="checkbox"/> Adequate capacity for general outpatient services (potentially through expanded telemedicine)
Laboratory capacity	Public health/policy
<ul style="list-style-type: none"> <input type="checkbox"/> Widely available, easily accessible testing <input type="checkbox"/> Healthcare providers easily able to order testing for patients and receive results <input type="checkbox"/> Reasonably rapid lab turnaround times, so the results can play a meaningful role in clinical management and isolation decisions 	<ul style="list-style-type: none"> <input type="checkbox"/> Adequate ability of local and state health departments to conduct timely contact tracing and case tracking <input type="checkbox"/> Agreement among local and regional public officials that the community is ready for some level of gradual or phased social reopening

* this would preferably include a statistically-significant, sustained decrease for at least one incubation period

2 Testing and tracking

A critical element of reopening a worksite is the ability to rapidly detect new cases of illness and prevent further spread of the illness throughout the workplace. Since a vaccine is not expected in the near term, employers must administer recurring health checks to monitor the health at the reopened worksite to ensure that it can safely remain open.



CHECKLIST

Testing and tracking

We recommend implementing one or more of the following onsite screening processes:

- PCR testing
- Serology (antibody) testing
- Contact tracing
- Symptom checkers
- Temperature checks and thermal scanning
- Situation monitoring

Below is a review of the various onsite screening options. We must also stress that the communication of the selected screening policy is as important as the policy itself, and we recommend investing a healthy amount of time into drafting and communicating the testing policy to employees in multiple forums (town halls, company all-hands, email bulletins, benefits portals) and physically posting the information in common areas (entrances, waiting rooms, dining halls). Clear policy procedures will help employees adhere to the policies, including what to do if they have been exposed to the virus, present with symptoms or test positive.

PCR testing

COVID-19 polymerase chain reaction (PCR) tests directly test for the presence of the COVID-19 virus. This test is usually obtained by a nasal or throat swab, and will indicate whether a patient is infected at the time of testing. COVID-19 has an incubation period of 14 days, so employers will need to retest, ideally once every incubation period.

PCR testing is key because it can identify asymptomatic patients who show no evidence of COVID-19, yet still carry the virus and can spread the virus to others. Early studies have shown that as many as 57% of patients infected with COVID-19 could be asymptomatic¹. Further, a model published in Science suggests that up to 79% of the spread of COVID-19 in Wuhan, China was caused by contact with unknowing, asymptomatic patients².

Harvard researchers recommend that local PCR testing levels reach 152 tests per 100,000 people³. As of early May, the average US rate of PCR testing was approximately 91 tests per 100,000 people and indicates

¹ "Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility - King County, Washington, March 2020." Centers for Disease Control and Prevention, 2 April 2020.

² Huang, Pien. "What We Know About The Silent Spreaders Of COVID-19." NPR, 13 April 2020.

³ Jha, Ashish K, et al. "Why We Need at Least 500,000 Tests per Day to Open the Economy - and Stay Open." COVID-19, 27 April 2020.



Information on viral testing is available on the [CDC website](#)

FAQs regarding approved viral tests is available on the [FDA website](#)



Information on antibody testing is available on the [CDC website](#)

Additional information on antibody testing is available on the [FDA website](#)



Additional information on antigen testing is available on the [FDA website](#)

Additional information on CRISPR testing is available on the [FDA website](#)

that testing must nearly double to satisfy the research community's recommendation. Understanding the types of testing available locally and the current rate of testing will help to inform the feasibility of reopening in a given geography.

Employers should also be aware that early studies have shown that PCR tests can have a false negative rate of up to 30%, so best practice is to pair PCR testing with additional workplace safeguards⁴.

Serology testing (aka antibody testing)

Serology tests measure the presence of virus-fighting antibodies that indicate immunity. These tests require a blood sample, either through a blood draw or in some cases a finger prick. Unlike PCR tests, which show presence (or absence) of the virus, serology tests show whether the test subject has ever had the virus. In theory, the presence of these antibodies indicates a person has a low likelihood of being infected again. However, we do not yet know the degree of immunity or how long this immunity lasts. Until more data is available, we recommend that employers deploying serology testing go ahead and retest for immunity at recurring intervals, or at minimum as soon as the worksite experiences a subsequent rise in cases.

There are a large number of companies claiming to have an antibody test ready for use. Early results suggest that many of the serology tests on the market today are inaccurate and unreliable, so employers will need to carefully vet the quality of a given serology test before selecting a vendor, and will need to test employees multiple times to address the rate of false readings.

New forms of testing

Newer tests have recently come online through emergency use authorizations, such as rapid antigen tests (which detect fragments of viral proteins) and CRISPR tests (which latch onto RNA sequences from the virus).

Quidel, maker of the antigen test approved by the FDA in early May, stated that their antigen test can provide a result within 15 minutes, compared to anywhere between a few hours and a few days for the PCR tests. The accuracy of the antigen test is still unknown, and the FDA cautioned that antigen tests could have a higher false negative rate than the PCR tests.

⁴ Yang, Yang et. al. "Evaluating the accuracy of different respiratory specimens in the laboratory diagnosis and monitoring the viral shedding of 2019-nCoV infections." medRxiv, 17 Feb 2020.

Sherlock Biosciences, maker of the approved CRISPR tests, stated that their test can provide a result in under an hour. Accuracy is similarly unknown for the CRISPR test.

Not much information is available yet on how accurate these tests are and when they will be widely available, but employers should continue to monitor updates in this arena, in the event that these offer more viable testing options.

i

Information on contact tracing strategy is available on the [CDC website](#)

Information on the Apple and Google contact tracing joint venture is available on the [Apple website](#)

Contact tracing

Contact tracing is considered the gold standard of outbreak intervention and involves analyzing all contacts had with an infected patient through location-based analysis. Repeated at scale, this approach creates a mapping of those who were exposed so that they can be contacted and instructed on steps to take to treat the condition and steps to take to avoid further spread.

The challenge with contact tracing is the invasiveness necessary to comprehensively track a patient's movement. Companies working on contact tracing, such as Apple and Google, have been met with skepticism due to the amount of private location data that they must process to provide accurate contract tracing. However, the public health community endorses contact tracing as core to stopping chains of virus transmission. To the extent that employees demonstrate an openness to contact tracing, we endorse its use, but this will vary greatly from one employee population to the next.

i

The CDC's symptom tracker can be found on the [CDC website](#)

The HowWeFeel symptom tracker can be downloaded on the [Apple app store](#)

Symptom checkers

Symptom checkers emerged as alternatives to help fill the gap created by PCR and serology testing shortages as of the end of April. Symptom checkers offered by the CDC or independent companies such as HowWeFeel pose a series of questions that can help gauge whether the patient is likely to have contracted COVID-19, and based upon that conclusion the app can then surface possible interventions and next steps.

Symptom checkers can be helpful, but the apps will (i) struggle to identify asymptomatic patients and (ii) are only as good as the information provided by users. As the proportion of employees completing voluntary symptom checks before entering the worksite declines, the symptom checkers ability to sense an outbreak will decline as well. It will be particularly important for employers to rally the employee base around the value of the symptom checking process to maximize participation and the impact on workplace safety.

Temperature checks and thermal scanning

In the absence of testing, employers have also implemented various forms of temperature checks to detect the presence of fever. While not all COVID-19 patients experience fever, temperature checks can be helpful when paired with additional workplace safety measures.



More information on temperature screening guidelines can be found on the [CDC website](https://www.cdc.gov)

General considerations related to temperature screening at the workplace:

1. Non-contact, self-administered temperature screenings are the **lowest risk methods** of providing this type of screening, because they minimize all person to person contact. Employers may choose to have employees **pre-screen** their own temperatures prior to coming to work, while others may choose worksite screenings.
2. Screening administered by a supervisor or other staff member creates opportunities for person to person spread. Therefore **personal protective equipment (PPE)** should be made available to the person conducting the screenings, and employees being screened should wear face coverings as well.
3. **Fevers can be masked** by people taking over-the-counter medications, like acetaminophen or ibuprofen. People who lack paid sick leave may be incentivized to take fever-masking medication and report to work while ill. For temperature screenings to be effective, **paid COVID-related sick leave** should be implemented, in order to minimize workplace spread of illness.

Thermal temperature scanning systems have emerged as another option to help prevent further infection spread by scanning a person's internal body temperature to identify those with fever. Amazon has installed thermal cameras at a number of its warehouse facilities to streamline the temperature check process, and other employers are considering implementing the technology as well⁵. McDonald's purchased no-contact infrared thermometers for all 14,000 US-based fast food restaurants⁶.

The efficacy of the technology is still unknown, as the scans can be confounded due to factors such as exercise, overeating, and external temperature. Also, not all COVID-19 patients have fever and a decent proportion are asymptomatic altogether. The FDA recommends pairing thermal scanning with a secondary screening method (e.g. thermometer check).

⁵ Dastin, Jeffrey. "Exclusive: Amazon Deploys Thermal Cameras at Warehouses to Scan for Fevers Faster." Reuters, Thomson Reuters, 18 April 2020.

⁶ Harwell, Drew. "Companies' use of thermal cameras to monitor the health of workers and customers worries civil libertarians." Washington Post, 28 April 2020.

Non-contact, self administered approaches to temperature screening:

Type	Pros	Cons
Employee pre-screen at home	Sick employees never enter the workplace. Logistically less difficult to implement. Employees would have to attest that temperature was normal prior to work, or temperatures could potentially be sent to employer electronically.	Unless temperatures are sent electronically to the employer (which may not be possible) this method requires reliance on employee self-report, which may or may not be accurate. If employees have an incentive to work despite illness, they may not accurately report. There also may be user error.
Infrared thermometer, self-service station	Can be quite accurate, depending on the manufacturer; does not require anyone to administer; temperature data may be sent electronically to a manager. May offer greater confidentiality, if people around you cannot see your temperature.	Self-service models are typically more expensive than hand-held infrared thermometer or thermal scanner.
Thermal scanner cameras	Can measure temperature from a greater distance, can potentially measure multiple people at once. Offers greater confidentiality, as people around you cannot see your temperature.	May be less accurate than infrared thermometers. May be more expensive than infrared thermometers.
Handheld thermometer for every employee for use at entry	Each employee is given their own, individual thermometer, either temporal (forehead) or tympanic (ear). They take their own temperature at entry, and show the reading to an entry attendant. Employees do not share thermometers, which reduces chances of cross-contamination.	May be less expensive than the other self-administered options. May be prone to some user error. May offer less confidentiality, as people around you may be able to see your temperature. Entry attendants will require masks, gloves, hand sanitizer, and potentially clear, plastic sneeze guards.

Situation monitoring

Analysis and reporting of accurate and timely health screening data will be key to remaining open. Employers will need to monitor screening data in as close to real time as possible to be able to intervene and avoid a full-scale worksite outbreak. There are three key considerations when it comes to making data actionable:

- Data must be analyzed at the work site-level. Aggregating the data across multiple sites or geographies will forfeit the precision necessary to make effective decisions, such as whether to quarantine, temporarily shut down for deep cleaning or to entirely shut down the facility for an extended period of time
- Data must be analyzed at the job function-level, as certain jobs will involve higher degrees of contact and exposure and subject employees and those around them to higher infection risk. Early identification of infection through monitoring of high risk job functions will allow an employer to adjust policies, such as additional social distancing or work shifts
- Forecasts that offer at least several weeks of visibility are crucial so that employers can plan ahead. The forecasts must be prepared on a rolling basis, which requires regular data refreshes to incorporate data updates as well as new data sources altogether. Forecast updates should ideally be executed daily given the speed at which the disease spreads.



Information on HIPAA considerations during the COVID-19 outbreak can be found on the [HHS website](#)

Privacy considerations

The U.S. Equal Employment Opportunity Commission (EEOC) made special accommodations for COVID-19, including allowing employers to test onsite employees for COVID-19 as a condition of entering the workplace. However, asking employees to share health information through test results or other means of screening may cause some employees to feel vulnerable and uncomfortable, and carries risk of employee suspicion if, for example, they believe they will be punished for testing positive.

Employers should work with their legal and HR teams to design programs that will instill employee trust in the new COVID-19 policies, and employers will want to take care to provide assurances about how data will be used, consequences of testing positive and a deliberate decision about whether participation in any program will be voluntary or mandatory.

3 Workplace attendance

Work attendance strategies can help to minimize the health risk to employees who reenter the workplace. Where possible, putting in place specific conditions for in-person attendance can help to create a safer working environment:



CHECKLIST

Workplace attendance

We recommend the following adjustments for work attendance as part of any reopening plan:

- Phased reopening, beginning with the lowest risk employees
- Directing those with symptoms to self isolate
- Where possible, allowing employees the flexibility to work from home

- Phasing in attendance beginning with the lowest risk employees, including employees under the age of 50 and employees without chronic conditions. One study found that people 60 years and older had a COVID-19 death rate 3x higher than the rest of the population⁷. Consider allowing higher risk employees to return to work once antibody tests can reliably detect immunity from the virus
- Ensuring that those with symptoms or a positive test do not enter the workplace and instead self-isolate to help with recovery from the virus and avoid spreading the virus to others in the workplace
- Allowing and even encouraging employees who are concerned about their health and personal safety to work from home, particularly those in non-critical functions who can be productive working remotely

⁷ Verity, Robert et. al. "Estimates of the severity of coronavirus disease 2019: a model-based analysis." *Lancet Infectious Diseases*, 30 March 2020.

4 Workplace preparedness

Preparing the workplace for optimal conditions prior to employees returning to work will further reduce the risk of infection and will be conducive to remaining open. We recommend implementing as many of the following preventative strategies as possible in order to minimize the spread of COVID-19:

Workplace strategies to minimize disease spread	
6-foot distancing	Aim to maintain physical distancing of at least 6 feet apart as much as possible. Use visible signs or markers to indicate 6 feet of distance.
PPE	Require the use of cloth masks or face coverings when around others.
Hand sanitizer and handwashing	Encourage frequent hand sanitizing and handwashing. Install hand sanitizer stations available to employees and provide frequent, regular hand-washing breaks.
Surface cleaning	Work with building management or janitorial staff to increase the frequency and intensity of cleaning of shared surfaces such as elevators, restrooms, waiting rooms, chairs, tables, equipment and door knobs.
HVAC	Work with building management to improve air circulation, filtration and ventilation with high efficiency particulate air (HEPA) filters. Increase humidity levels to 40 to 60 percent, and use portable humidifiers if the HVAC system does not allow for this.
Conference rooms and meetings	Limit the use of conference rooms to critical meetings only that can also adhere to the 6-foot distancing guideline, and encourage as many meetings as possible to occur virtually.
Common areas	Restrict the use of common areas, such as lunchrooms and break rooms, in order to promote social distancing by either further staggering lunch and break schedules to reduce traffic, or by closing the common areas altogether.
Signage	Place ample and visible signage in high traffic areas, such as entry points, elevators, restrooms, waiting rooms, and common areas that remind employees of policies and available resources for workplace sanitation and health resources.
Early warning system	Implement an early warning system that can screen for potential infections before employees enter the workplace, including through thermometer checks, thermal imaging, symptom checkers, or PCR / serology testing if and when available.

Workplace strategies to minimize disease spread	
Escalation policies	Per OSHA, employers should develop policies and procedures for employees to report when they are sick or experiencing symptoms of COVID-19 so that employees are well versed in how to proceed. This includes guidelines for who employees should inform of symptoms, designating onsite isolation areas for symptomatic patients to enter to avoid contact with others, the amount of time employees should remain in self-isolation and what must occur for them to be able to return to work.
Health benefit design	Healthcare systems may be disrupted or slow, and members will need a heavy degree of support, especially high risk members with chronic conditions or other complex medical needs. Consider putting virtual options in place, like telemedicine providers, healthcare navigation or clinician hotlines to augment overstretched local healthcare systems. This will enable employees to receive treatment guidance without getting exposed to the virus in a clinic, or exposing others.
Stay current with latest guidelines	Put in place a process through which management receives the regular updates from the EEOC, OSHA and CDC as it pertains to pandemic situations, and review with HR and legal teams.
Employee town halls	Host regular town halls with employees to communicate regular updates, including new policies, newly available health resources and new health guidelines. Consider inviting outside experts, such as epidemiologists, to answer health-related questions.

5 Navigation and administrative support



CHECKLIST

Navigation and administrative support

Preparing the following processes will greatly simplify the task of administering the return to work strategy once a worksite reopens:

- COVID-19 absence management guidelines, including short-term disability and workers comp
- Tracking and analyzing the test results to make the investment in testing even more actionable
- Integration with health benefits to streamline employee access to healthcare support



More information on employee paid leave rights can be found on the [Department of Labor website](#)

Employers should consult with their works compensation vendor to determine coverage details

Absence management

Employers will experience high levels of employee absence until a vaccine can defeat COVID-19 virus. Given nuance and complexity, we recommend that employers reexamine their short term disability and workers' compensation policies and work with their vendors to map out and confirm treatment of different absence scenarios. Employees diagnosed with COVID-19 will likely go through a standard sequence of paid leave followed by short-term disability, depending upon how long they are impacted by the virus. Certain situations introduce complexity, such as a scenario where the employee contracts the virus while at work (either onsite or traveling for business), in which case they might qualify for workers' compensation. Employers will want to confirm treatment of these scenarios with their vendors so that the policy is set before the need to apply it arises. Given likely disruption to the vendors themselves, employers will also want to prepare employees to expect extended wait times when enrolling in disability programs.

Extended shutdowns that result in disruption to public transportation could prevent employees from being able to commute to work. We recommend that employers align on a clear stance toward whether or not impacted employees qualify for some form of coverage if they cannot work remotely. Typically this type of situation would not be covered by disability policies, but could be covered by an emergency leave policy typically used during natural disasters.

Employers may also encounter situations where, despite an employer implementing workplace precautions, employees do not feel safe returning to work and will refuse to return to the worksite. Employers will need to design a consistent response to this situation in accordance with their company leave policies.

Tracking and analyzing the test results

Employers who implement PCR or serology testing policies will want to also implement data capture and data aggregation processes. These processes will allow management to observe trends and inform decisions as to whether to stay the course or adjust the return to work strategy in light of rising, declining, or sustained absence of infections.

There will be great sensitivity around tracking employee health data. Employers may find it more palatable to hire a third party firm to collect,

analyze, summarize and report the data rather than doing so in-house, both due to potential employee privacy concerns as well as the actual complexity of aggregating and analyzing the data. Employers will want to ensure that those handling the data are trained in HIPAA policies and adhere to those policies. Employers will also want to ensure that they clearly communicate what the data will be used for, what it will be not used for, whether it will be identifiable or not, and whether the data can be used against an employee in any way. Any testing strategy will be implemented in order to promote workplace safety and employee health, and clear communication of that stance can help to alleviate concern over data privacy.

Integration with health benefits

To simplify the process of managing a confirmed or suspected infection, employers can implement an escalation path for employees to quickly connect with clinical support that will direct them through the next steps in treatment. The escalation path will be most effective if there is a primary entry-point, either run by HR or delegated to one of the health benefit vendors, so that members can easily get started. A vendor with a diverse service offering can offer integrated care options to the employee, including telemedicine, care management, referrals to in-person care and expert medical opinions for complex clinical situations. The ability to rely upon one vendor for these services will streamline the experience and minimize the likelihood of process abandonment from the employee.

To further streamline the process, employers can consider outbound calling or messaging efforts directed at those who test positive for the virus, which can be done by the employer itself or outsourced to a third party clinical vendor. One caution is that this would involve sharing private health information and carries with it certain legal and liability risks. One other consideration that must be managed is employee suspicions owing to either employer or vendor knowing their health status. Employers will need to work with counsel and managers to assess the legal and human capital risks and weigh those against the benefits of real-time virus intercepts.

6 Clinical response

Responding to a public health crisis of this magnitude requires a multi-pronged clinical strategy guided by population health and epidemiological best practices and informed by data.



CHECKLIST

Clinical response

Employers must prepare a return to work plan that addresses all three phases of the rollout:

- Phase 1: Preparation**
Develop the reopening plan alongside epidemiology experts
- Phase 2: Active monitoring**
Implement data processes to monitor the success of the program
- Phase 3: Clinical support**
Provide access to clinical resources in the event of a health need

Phase 1: Preparation

The clinical response must begin by laying out a comprehensive strategy, largely consisting of various elements from this blueprint. Employers must collaborate with trained epidemiologists who are experts in the nature of pandemics in order to draw up a return to work response that balances company preference and culture with epidemiological best practices. An epidemiologist will be able to consult on virtually every aspect of the return to work plan: forecasting, testing and tracking, workplace attendance policies, workplace preparedness approaches, administrative support and patient care considerations. The output from the preparation stage is a documented plan that can be shared with the executive team for approval and can then swiftly move into execution in order to reopen worksites as quickly as possible.

Phase 2: Active monitoring

Once the plan is in motion and worksites have reopened, steps must be taken to monitor the health status of the population so that the worksites can remain open. This means selecting a health monitoring approach, be it contact tracing, onsite testing, temperature checks, symptom tracking, or thermal imaging, to name a few. A critical aspect of the active monitoring phase is surfacing real-time data, or as close to it as possible, so that it can be analyzed and shared with the decision maker(s) who will decide whether an intervention is necessary. Catching an increase in COVID-19 cases before the outbreak has spread far gives management time to contain the outbreak before the worksite is forced to shut down entirely. Interventions can include isolating the sick employee until they can leave the premises and self-isolate at home, institute a deep cleaning of any area the employee entered to protect the rest of the workforce, and notify any employees with whom the infected employee had contact so that those employees can also self-isolate at home. Failure to catch the spread of the disease will result in a severe outbreak that will likely force the entire worksite to shut down again so that the virus can be contained and employees can recover.

Phase 3: Clinical support

Employees who have either been exposed to the disease, are showing symptoms, test positively or have a non-COVID, high risk clinical issue will need fast access to clinical resources in order to begin, or continue, their treatment protocol. Employers should prominently position access to the designated clinical support team in high traffic areas, such as breakrooms, lobbies and entryways at the worksite, as well as online in employee benefit portals, so that employees can easily navigate through to a clinical resource. Impactful services that can support members in need of care include:

- **Telemedicine** (diagnosing, prescribing and ordering tests)
- **Care management** (treatment supervision and support)
- **Concierge support services** (guidance through administrative red tape, such as coverage and billing)
- **Expert medical opinions** (consulting on complex conditions and how to best treat during constrained access to care)
- **Physician referrals** (locate and schedule appointments with high-quality local doctors)

These programs will enable fast access, continuity of care and the elimination of gaps in care, all of which will be critical during the uncertainty of COVID-19. Employers should evaluate their existing benefits ecosystems to determine which health benefits can offer members immediate support and position those benefits prominently.

Employers may want to consider installing a navigator who can offer a harmonized primary entry-point and an ecosystem of services. Navigators can route members into appropriate services, many of which they likely offer themselves in an integrated program.

Access to virtual care will also be particularly important so that infected employees do not expose others by visiting provider offices unnecessarily. Employers who do not currently offer virtual care will want to consider installing various services that can support what is likely to be many months of clinical disruption.

In order to serve both the COVID-19 and non-COVID-19 clinical needs of the patient populations, we recommend employers create access to programs that can serve urgent, specialty and chronic care needs. In particular, employees with specialty care and chronic care needs are likely to experience severe gaps in care due to provider offices closing down and hospitals becoming overwhelmed with COVID-19 patients. An April 2020 McKinsey survey found that 97% of members who experienced a doctor appointment cancellation plan to reschedule, which suggests that the vast majority of care will be delayed as opposed

to canceled⁸. Left unchecked, these gaps in care will worsen and risk ballooning into unnecessarily high costs when provider offices do open back up.

The silver lining for employers is two-fold: (i) virtual care programs offer opportunities to maintain continuity of care for many needs without requiring in-person care and (ii) a portion of the 97% of care to be rescheduled might be unnecessary and can be intercepted and assessed through virtual care and then redirected to a more appropriate treatment path.

Employers may also have benefits that grant employees access to in-person care through either onsite / near-site clinics or centers of excellence (COEs). If this is the case, employers will want to include in the return to work plan specific guidelines around when to seek in-person care through these benefits so that employees know that they have access to in-person care while balancing the avoidance of unnecessary exposure to COVID-19.

⁸ "Helping US healthcare stakeholders understand the human side of the COVID-19 crisis: McKinsey Consumer Healthcare Insights." April 2020.

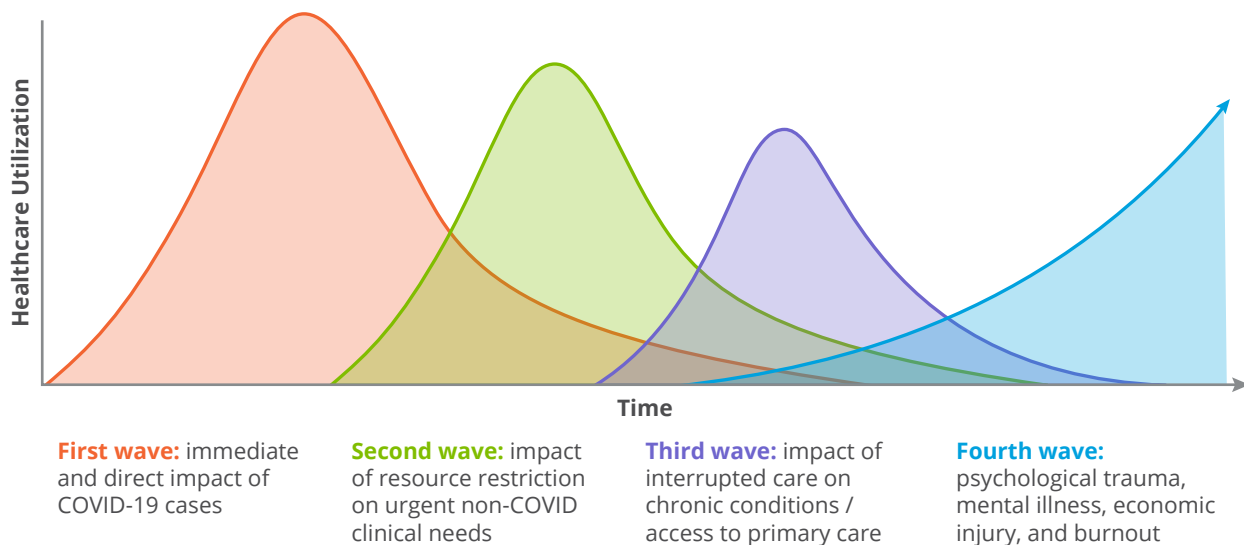
7 What comes next

The world is still in the early stages of fighting the spread of COVID-19. While the disease continues to spread throughout the US, early data has provided insight into what will come next over the next 6–12 months. Each time COVID-19 reemerges and begins to spike again, we expect that some or all of these phases will repeat, and the cycle could continue until a vaccine can properly eradicate the virus.

First wave: COVID-19 spread rapidly and caused national disruption

COVID-19 spread rapidly throughout the United States, which caused many states to go into lockdown, threatened to overwhelm hospitals, shut down all but the most essential businesses and brought the economy to an unprecedented standstill.

After nearly a month of lockdown, social distancing measures have begun to flatten out the disease curve and the nation has turned its attention to safely reopening for business. As we have covered throughout this blueprint, reopening is complicated and requires significant attention to comprehensive data and epidemiological best practices. After worksites reopen, there will be other challenges that employers must overcome to preserve business continuity. Based on



Graph is illustrative and does not necessarily reflect the magnitude of projected healthcare utilization.

how COVID-19 has impacted the country and the steps the US has taken in response to the spread, employers will want to begin preparation for the next waves of disruption:

Second wave: Demand spikes for urgent specialty care

Following CDC guidance, hospitals canceled elective operations, postponed regular visits, and sent home patients with less critical ailments to preserve beds and equipment for coronavirus patients. A recent McKinsey survey found that 1 out of 3 patients had canceled an upcoming medical appointment with 97% planning to reschedule their care⁹. As a result, provider offices will experience a flood of patient demand for specialty care in particular.

Employers can mitigate disruption caused to their businesses by providing support and resources to help employees pursue appropriate care. With 25% of care considered waste in normal times, a chunk of the care sought will be unnecessary¹⁰. Employers can provide employees with access to virtual care, such as telemedicine or expert medical opinions, to align on appropriate treatment plans, and then resources to refer the employee to high quality, in-person care for necessary treatment. This will optimize local health resources and ensure that employer and employee healthcare spend is appropriate.

Third wave: Reengaging the chronically ill population

Patients with chronic diseases have experienced significant gaps in care while sheltering in place. Conditions such as diabetes, emphysema, and hypertension, that would normally be treated and closely monitored by a patient's doctor, have likely not been well managed amidst the chaos. Medications have been difficult to refill given overcrowding at pharmacies, specialist appointments have been unavailable, and chronically ill patients at higher risk of COVID-19 complications have likely been more hesitant to venture out. There is significant risk of routine chronic illness treatment escalating to inpatient hospital stays on account of less rigorous condition management during social distancing. Employers can help employees in this situation by making telemedicine and care management programs available to intervene, fill gaps in care and maintain continuity in treatment before the employee is forced to call 9-1-1 and endure a lengthy stay at the hospital.

⁹ "Helping US healthcare stakeholders understand the human side of the COVID-19 crisis: McKinsey Consumer Healthcare Insights." April 2020.

¹⁰ William H. Shrank, MD, MSHS. "Waste in the US Health Care System: Estimated Costs and Potential for Savings." JAMA, 7 October 2019.

Fourth wave: Spike in behavioral health needs

By the end of April, COVID-19 resulted in over 1 million infections and 62,000 deaths, 30 million unemployment claims, and at one point 1 in 4 Americans was sheltering in place¹¹. Many have experienced deep loss—lost loved ones, lost financial security, lost vacations, lost privacy while at home with children, and lost time. The unprecedented uncertainty and fear from COVID-19 risks seriously exacerbating conditions for those who already experience depression, anxiety and other behavioral disorders. New diagnoses are likely to increase as well due to the draining and prolonged circumstances of the virus. In 2017–2018, 17 million adult Americans reported experiencing a major depressive within the prior twelve months, and this is likely to accelerate on account of impacts COVID-19¹².

Employers can help their employees cope with the stress and loss caused by COVID-19 by making behavioral health resources visible and available, such as employee assistance programs (EAP), virtual sessions with counselors and psychologists who can engage and support employees' mental wellbeing, or clinical support teams who can screen for signs of mental health needs and can escalate to the EAP or other behavioral health resources.

¹¹ Foster, Robin and Mundell, E.J. "As More States Clamp Down, 1 in 4 Americans Now Under 'Shelter in Place' Orders Due to Coronavirus." US News & World Report, 21 March 2020.

¹² Chidambaram, Priya. "The Implications of COVID-19 for Mental Health and Substance Use." Kaiser Family Foundation, 21 April 2020.

8 Additional considerations

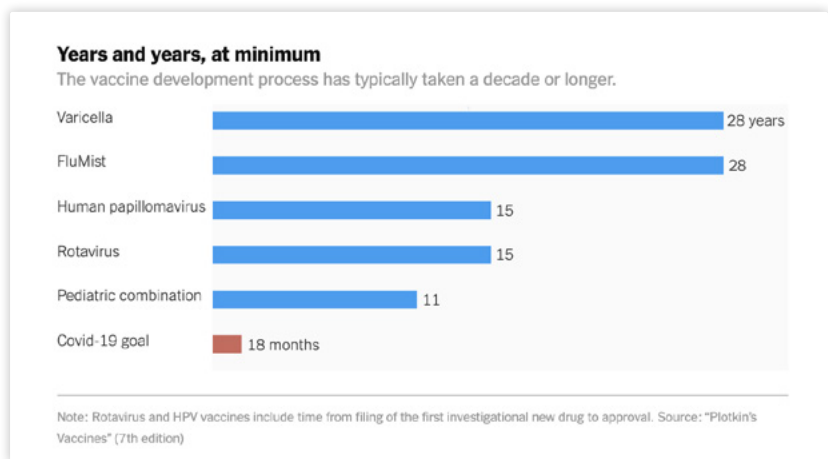
Subsequent virus resurgence

The country is already in the process of reopening, but the lack of vaccines and sufficient levels of serology and PCR testing puts the reopening at risk of setbacks. Absent proper tracking, it is likely that we will see a resurgence of the virus in pockets of the country. Employers will want to prepare contingency plans as they reopen that will allow them to quickly respond to local outbreaks. These could include tiered phases of more aggressive preventative measures, such as transitioning from voluntary symptom checks to mandatory, installing thermal imaging equipment, or even setting infection rate thresholds, both locally or within the facility itself, that would trigger a temporary shutdown. The importance of being able to respond quickly cannot be understated, and a fully prepared plan will enable decisive action.

i Find the latest on vaccine development on the [FDA website](#)

Vaccine development timeline

Experts, including Dr. Fauci at NIH, have predicted that a vaccine could be ready as early as January 2021. Other more conservative estimates are in the 12–18 month range, which would be around Summer 2021. The reality is that vaccines often take much, much longer to develop. In normal times, the combination of academic research, phase 1 – phase 3 clinical trials, buildout of vaccine manufacturing sites and FDA approvals could take a decade or more¹³:



Source: [The New York Times](#)

¹³ Thompson, Stuart A. "How Long Will a Vaccine Really Take?" The New York Times, 30 April 2020.

Given the urgency, steps are being taken to dramatically accelerate the timeline to a vaccine:

- The Bill and Melinda Gates Foundation has committed billions of dollars to build out factories for 7 vaccines. "Even though we'll end up picking at most two of them, we're going to fund factories for all seven, just so that we don't waste time in serially saying which vaccine works and then building the factory," Bill Gates said.
- Over a dozen vaccines are currently in development simultaneously, which will increase the likelihood of success given the high rate of failure vaccine attempts typically experience: less than 10% of drug trials are approved by the FDA¹⁴.
- There is talk of overlapping clinical trial phases to begin one trial before the previous trial is completed.
- Accelerate federal approval timelines.

Despite the predictions, it is too early to forecast when a vaccine will be available with enough certainty for it to be actionable. What is certain is that the vaccine will not be available within the next couple of months, which is the period during which much of the country will reopen.

Vaccine distribution process

Another consideration in the timeline to a post-COVID world is that once the vaccine is developed, the logistics of distributing it to the global community will be immensely complicated and will require additional time and planning to orchestrate smoothly. As local governments, health systems and test manufacturers collaborate on a distribution strategy, prepare for further delays that could add to the 12–18 month vaccine timeline.

The reality of this timeline underscores the importance of setting a plan in motion now that has the proper processes in place to last an extended period of time and withstand the sequence of challenges that will arise in the short-, medium- and long-term.

¹⁴ Thompson, Stuart A. "How Long Will a Vaccine Really Take?" The New York Times, 30 April 2020.

Appendix

Example approaches to reopening: test-based and non-test-based

Test-based approach (preferred)

Progression to next phase depends on whether spikes in illness occur

	Who can come back to work	Workplace policies to reduce asymptomatic spread	Workplace policies to reduce symptomatic spread	Environmental control measures	Monitoring and compliance
Phase 1	<p>Immune workers: Workers with a positive PCR test who recovered from infection AND workers who have documented immunity via antibody testing.</p> <p>Prioritize essential workers first.</p> <p>High risk individuals should continue to stay home since we do not know how long immunity lasts.</p>	<p>Maintain 6 feet of distancing between employees. This may involve phased shifts or alternating, staggered teams.</p> <p>Require cloth face coverings.</p> <p>Ban in-person meetings.</p> <p>Avoid elevator use or limit to 1-4 employees if possible.</p> <p>Make sanitizer available or create handwashing breaks; sanitizing wipes for personal areas.</p>	<p>Daily symptom checker/reporting.</p> <p>Temperature check points at entry.</p> <p>Establish plans for isolation of ill employees.</p> <p>Avoid sharing of workspaces, pens, keyboards, and supplies.</p> <p>Consider an “eat at your desk” policy or establishing non-contact food delivery options.</p>	<p>Signs or markers designating 6 feet of distance.</p> <p>Increase frequency of cleaning of all high-touch areas.</p> <p>Consider plastic sneeze guards at public-facing desks or service windows.</p> <p>Consider installation of touchless doors and fixtures.</p> <p>Consider airflow and HVAC upgrades.</p>	<p>Monitor number of employees with symptoms.</p> <p>Monitor number of employees with fevers at checkpoints.</p> <p>Report positive employees to health department.</p> <p>Track all entries and exits.</p> <p>Set thresholds for when to reduce onsite staff or close.</p> <p>Random compliance checks.</p>
Phase 2	<p>Workers without evidence of previous infection or immunity, who are NOT high risk.</p> <p>High risk individuals should continue to stay home.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>In addition to the above, consider an additional, deep clean of the worksite, prior to bringing the new wave of employees.</p>	<p>Same as above but reiterate the importance of symptom reporting to new wave of employees prior to return.</p>
Phase 3	<p>Bring back high risk individuals who have known evidence of infection or immunity. High risk workers with no evidence of immunity should only be brought back after consultation with local/state health officials.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>In addition to the above, consider an additional, deep clean of the worksite, prior to bringing the new wave of employees.</p>	<p>Same as above but reiterate the importance of symptom reporting to new wave of employees prior to return.</p> <p>Have care options available (employee clinics, telemedicine, etc) to get immediate aid to high risk workers.</p>

* 2-3 incubation periods between each phase

Non-test-based approach

Progression to next phase depends on whether spikes in illness occur

	Who can come back to work	Workplace policies to reduce asymptomatic spread	Workplace policies to reduce symptomatic spread	Environmental control measures	Monitoring and compliance
Phase 1	<p>Non-high risk workers return first, either allowing them to return voluntarily or identifying specific teams or functions that return due to the essential nature of their work.</p> <p>High risk individuals should continue to stay home.</p>	<p>Maintain 6 feet of distancing between employees. This may involve phased shifts or alternating, staggered teams.</p> <p>Require cloth face coverings.</p> <p>Ban in-person meetings.</p> <p>Avoid elevator use or limit to 1-4 employees if possible.</p> <p>Make sanitizer available or create handwashing breaks; sanitizing wipes for personal areas.</p>	<p>Daily symptom checker/reporting.</p> <p>Temperature check points at entry.</p> <p>Establish plans for isolation of ill employees.</p> <p>Avoid sharing of workspaces, pens, keyboards, and supplies.</p> <p>Consider an “eat at your desk” policy or establishing non-contact food delivery options.</p>	<p>Signs or markers designating 6 feet of distance.</p> <p>Increase frequency of cleaning of all high-touch areas.</p> <p>Consider plastic sneeze guards at public-facing desks or service windows.</p> <p>Consider installation of touchless doors and fixtures.</p> <p>Consider upgrades in HVAC systems.</p>	<p>Monitor number of employees with symptoms.</p> <p>Monitor number of employees with fevers at checkpoints.</p> <p>Monitor employee absenteeism.</p> <p>Track and documents all entries and exits.</p> <p>Set thresholds for when to reduce staff onsite or close.</p> <p>Random compliance checks.</p>
Possible Phase 2	<p>If antibody testing becomes available, consider bringing back high-risk employees with evidence of immunity.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>In addition to the above, consider an additional, deep clean of the worksite, prior to bringing the new wave of employees.</p>	<p>Same as above but reiterate the importance of symptom reporting to new wave of employees prior to return.</p>
Phase 3	<p>High risk workers with no evidence of immunity should only be brought back after consultation with local/state health officials.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>Same as above but reiterate all protocols to new wave of employees prior to their return.</p>	<p>In addition to the above, consider an additional, deep clean of the worksite, prior to bringing the new wave of employees.</p>	<p>Same as above but reiterate the importance of symptom reporting to new wave of employees prior to return.</p> <p>Have care options available (employee clinics, telemedicine, etc.) to get immediate aid to high risk workers.</p>

* 2-3 incubation periods between each phase

Blueprint for a Healthy Return to Work

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