

# PREPARING FOR DISASTER



Today's scientific lab leaders are facing new pressures and demands to continue to innovate while looking for more lab productivity. With tighter deadlines, increased budget scrutiny, pressure to improve reproducibility and evolving technologies, time that could be spent on scientific activities is spent on non-core ones.

To help you overcome these barriers to success, OneSource Laboratory Services has built a complete suite of solutions that provide the knowledge, applications, services and manpower today's labs need, including uptime optimization, lab analytics and workflow solutions. Digital innovations give you access to real time reports that help you make informed decisions about your lab. And compliance issues are avoided with guidance from experts who have worked with companies like yours.

Our knowledge and experience spans across industries, including Pharmaceuticals/Biopharmaceuticals, Food Safety, Environmental and Industrial. Wherever your challenges lie, OneSource Services will ensure that your lab runs at maximum efficiency, returning time to your scientists to do what they do best.

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# Maintaining essential operations following disaster events

**A TEAM OF EXPERTS CAN KEEP YOUR LABORATORY UP AND RUNNING WHEN DISASTER STRIKES**



## How can I prepare my laboratory to maintain operations in the event of a natural or other unforeseen disaster?

The cost of a disaster event can be devastating for a laboratory organization. A prolonged interruption in production creates significant delays in delivering products to patients, and can lead to drug shortages. The subsequent financial losses, and damage to an organization's reputation can take years to recover and repair. Implementing a disaster prevention and recovery plan is challenging, as it is difficult to account for every eventuality, such as fires, floods, accidents, pandemics, and even cyber crime. Nevertheless, it is critical to define steps to recovery, from creating a business continuity plan to defining the requirements for short-term to eventual long-term operation. It also requires a team of experts capable of rapidly mobilizing to assess the situation and begin implementing recovery efforts to support business continuity in the short-term, and work toward a complete resolution in the long-term.



## PerkinElmer's OneSource® Professional Services is an integrated solution for business continuity and disaster recovery planning and execution.

PerkinElmer's OneSource® Professional Services combines business continuity and disaster recovery planning with a qualified team prepared to execute recovery solutions. Disaster prevention strategies are designed to maintain laboratory functionality and integrity under various conditions of uncertainty. In addition to workflow and process analyses, readiness assessments, gaps analyses, and inventory audits, the team can develop, test, review and update a comprehensive business continuity and disaster recovery plan. The team has expertise in laboratory technologies, instruments, information services, and compliance and can rapidly mobilize to begin remediation efforts in the event of a disaster. PerkinElmer's OneSource® Professional Services helps laboratories reduce, manage, or eliminate potential risks, and provides a robust response when faced with a disaster event.



To learn more, visit:  
[www.perkinelmer.com/onesource](http://www.perkinelmer.com/onesource)



# Is Your Laboratory Prepared if Disaster Strikes?

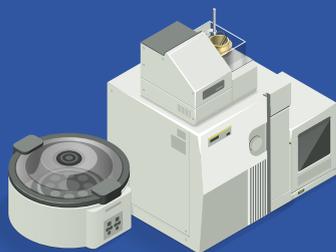
The right team can help you develop and execute disaster management and recovery solutions



## Disaster Events

Natural disasters, man-made disasters, and cyber crimes occur with little or no warning, and can have catastrophic effects on laboratories. These events bring operations to a halt, creating significant delays in production, increasing time to market, creating drug shortages, impacting quality and contributing to potentially devastating financial losses.

## What's At Risk?



### INSTRUMENTS



### DATA



### COMPLIANCE

Having a plan and enlisting a qualified team to execute recovery efforts can prevent significant downtime, quality issues, financial losses, and protect the organization's reputation.

## Key processes for disaster prevention and recovery

### Disaster prevention

- Create a business continuity and disaster recovery plan
- Perform key assessments
- Assign priority listings

### Disaster recovery

- Mobilize and assess the laboratory
- Establish temporary workspace and staffing
- Remediation and compliance quality audit

## The PerkinElmer OneSource® Solution

The overall goal of disaster prevention and recovery measures is to maintain business continuity, and support long-term recovery. PerkinElmer's OneSource® Professional Services offers an integrated solution to combine business continuity and disaster recovery planning with a qualified team of experts prepared to execute recovery solutions.



To learn more about PerkinElmer's OneSource® Professional Services for disaster recovery, visit: [www.perkinelmer.com/onesource](http://www.perkinelmer.com/onesource)



# EXPECT THE UNEXPECTED: DISASTER PREVENTION AND RECOVERY

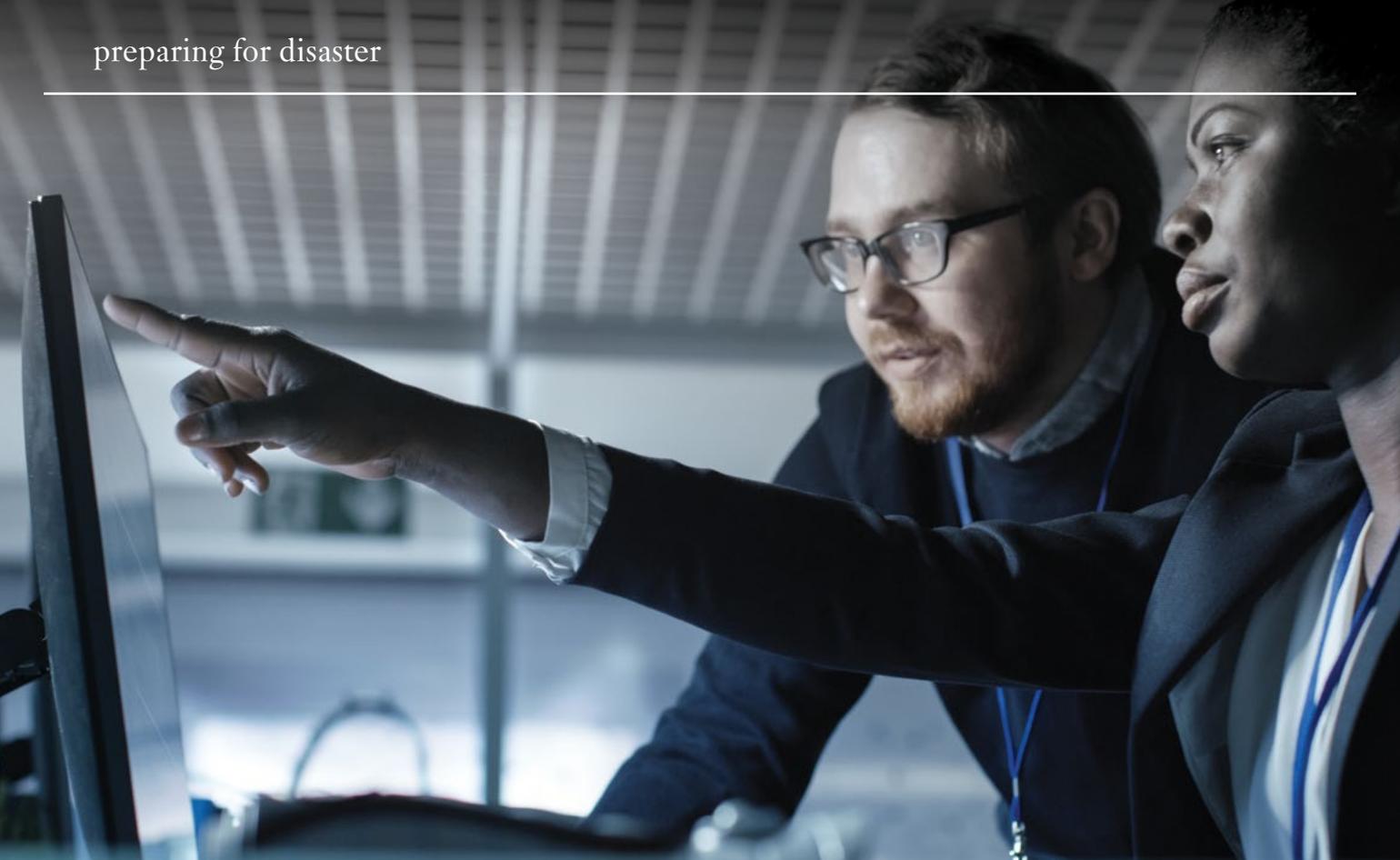
**An expert team creates a robust plan, and is on the ground when you need them most**

**W**e live in a world of uncertainty. Disaster events, such as fires, severe weather, blackouts, cyber-crime, accidental damage, and more recently, the COVID-19 pandemic, occur with little or no warning and the effects can be catastrophic— especially for laboratories. These events bring operations to a halt, creating significant delays in production, increasing time to market, creating drug shortages, and contributing to potentially devastating financial losses. While it is not possible to anticipate every potential disaster, developing a recovery plan and partnering with a highly trained team of experts to execute recovery efforts will ensure business continuity when a serious event occurs. PerkinElmer's OneSource® Lab Services offers an integrated solution, combining business continuity and disaster recovery planning to help laboratories manage or eliminate potential risks, with a team of experts ready to deploy a robust response in the event of a disaster.

## **INSTRUMENTS, COMPUTER SYSTEMS, AND COMPLIANCE ARE AT RISK**

The laboratory environment is very different from an office environment. It contains instrumentation and computer systems on their networks or managed separately from the rest of the company. Without proper planning and recovery strategies, natural or man-made disasters can have devastating, long-lasting consequences for laboratories. When instruments, computer systems, or compliance efforts are compromised, significant downtime, issues with quality, and financial losses result. It can take years to recover from such an event, and even longer if the organization's reputation is affected.

Sophisticated instruments are highly valuable assets and can be impacted by disaster events. In addition to direct damage in the event of a fire, for example, indirect damage can occur as authorities work to control the fire. Or, during a ransomware cyber attack instrumentation is directly impacted and computer systems become



inoperable. Depending on the situation, a plan is needed to perform an assessment of the damage and then define what is needed to recommission the instruments, such as careful cleaning, repairing damaged components, or declaring a complete loss that requires replacement.

Many of these instruments also have dedicated computers to initiate and control analysis, as well as store and manipulate large amounts of data. In the event of a cyber attack or other disaster that compromises computer systems, irreplaceable data may be lost. Proper planning, including implementing cloud or virtualization technology or offline backup solutions can prevent data loss, and engaging a reliable recovery team with specialized laboratory IT expertise can accelerate the process of recovery and restoration.

Laboratory remediation and potential relocation following a disaster event also poses challenges for organizations aiming to maintain compliance. Following remediation, laboratory systems must be audited and re-validated to ensure data integrity. A credible partner can determine a compliance quality audit post-remediation.

Many disasters render the facility no longer fit for use, sometimes resulting in the construction of a new facility. Recovery plans need to take this into account and have built-in solutions for dealing with such situations.

Requirements need to be defined so that staging facilities can be identified to support laboratory operations while the new laboratory is under construction. This is one of the more important requirements to minimize disruption to R&D. Further, instrument, computer, and compliance states must be assessed to create a disaster baseline. Relocation requires instrument decommissioning, packing and transport to a new or temporary location and upon arrival, instruments require recommissioning and potentially re-qualification. The entire relocation process must also be completed quickly, to minimize the significant costs associated with downtime, and requires a recovery team with expert knowledge, processes, and tools.

Disaster does not discriminate between laboratory assets. Costly, sophisticated instruments, irreplaceable data, and compliance efforts are all at risk. Developing a comprehensive business continuity and disaster recovery plan protects these assets, and directs restoration efforts to bring critical operations back online.

## **CREATING A BUSINESS CONTINUITY AND DISASTER RECOVERY PLAN**

Laboratories are complex, fast-paced environments, with numerous personnel, instruments, and workflows.

Following a disaster event, it is not feasible to restore

every individual laboratory function in the short-term. Rather, the goal of a business continuity and disaster recovery plan is to restore critical functions to support business continuity and minimize losses, while working toward full long-term recovery.

One of the first steps in creating a plan is to identify critical functions within the lab, as well as the responsible personnel, the frequency at which they are performed, and whether they could be performed at another site. Next, it is important to determine the costs incurred if the laboratory was unable to perform these tasks. In addition to lost revenue, fines or penalties, legal liability, personal damage, public harm, and poor public image should also be considered. Determining whether these critical functions could perform at reduced operating efficiency, and whether they require other external resources, technology, or space, will be helpful for developing a plan.

With unique knowledge across a wide range of laboratory technology, compliance, and information services, OneSource can help laboratories develop a business continuity and disaster recovery plan, as well as perform key workflow and process assessments, lab readiness assessments, risk assessments, gaps analysis, assign priority listings, identify critical off-site temperature controlled storage requirements, and more. With a plan in place, the team can mobilize quickly to begin remediation efforts to maintain lab functionality and integrity.

### PUTTING PLANS INTO ACTION

PerkinElmer's OneSource® Professional Services offers an integrated solution to combine business continuity and disaster recovery planning with a qualified team prepared to execute recovery solutions.

Following a devastating fire in a large cancer research center, the PerkinElmer team was enlisted to take over full project management of the recovery effort. These efforts have many moving parts, including creating a complete inventory, triaging instruments and performing cleaning, testing, repair, decommissioning and relocation, as well as identifying instruments requiring original equipment manufacturer (OEM) support and engaging the appropriate companies. The team successfully carried out these tasks in just four months, and completed recommission and re-qualification within 12 months.

The team was also enlisted as an IT partner to accelerate restoration and recovery efforts following a cyber attack that affected 6000 customer research systems. Activities

such as rebuilding computer configurations and installing software are all part of the recovery plan—and require mobilization of laboratory IT specialists around the globe. In this case, the team was able to accelerate the recovery time from years to just six weeks.

### UNCERTAIN TIMES AND A “NEW NORMAL”

The ongoing COVID-19 pandemic has affected laboratories and organizations around the globe. For those deemed essential services, the pandemic poses new challenges to maintaining day-to-day operations. To support pharmaceutical laboratories and manufacturing sites, PerkinElmer is providing instrument maintenance services and IT support, as well as performing compliance work (such as instrument qualifications and system validations). PerkinElmer scientific staff are also working in laboratories to maintain operations, and working with laboratory leaders to develop a “new normal”, by developing processes to maintain production while keeping staff safe.

Disaster events can cause significant financial losses, compliance risks, brand damage, and threaten the future of the laboratory organization. The overall goal of disaster prevention and recovery measures is to maintain business continuity, and support long-term recovery. PerkinElmer's OneSource® Professional Services makes it possible to plan for the unexpected, and initiate a response to keep your lab functioning and mitigate losses if the unthinkable happens.



**PerkinElmer**<sup>®</sup>  
*For the Better*

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