

# Risk Mitigation CASE STUDY



## Value of a Business Continuity Plan Lessons Learned from Hurricane Sandy

**Situation** The impact of Hurricane Sandy on the East Coast of the United States in 2012 highlighted the destructive effect that natural disasters can have on research samples. In the aftermath of the storm, thousands of refrigerated and frozen biological samples, decades of critical research, were lost, and thousands more were at risk of being lost or destroyed because of the ongoing loss of power and flooding in the region.

Several medical centers in the Manhattan, New York area were evacuating as water poured in and the power failed. Collectively, among the institutions impacted, there was a couple hundred years' worth of invaluable research. Although a major university medical center in the region had a plan in place to store 100% of its research samples at other local university sites, unfortunately even these sites were impacted by the storm and experienced the same issues with power outages and flooding.



Do you have a plan to protect your valuable samples?

**Solution** When we learned how bad the storm had devastated approaching the East Coast, BioStorage Technologies proactively dispatched a rescue team and its ReloFleet™ mobile biorepository vehicle to the Manhattan area to save the research samples.

Prior to the team's arrival, the investigators had kept the samples cold by placing dry ice in the freezers. Sample identification was challenging due to loss of power and lack of access to IT systems, and further, each laboratory had individual processes and systems for sample tracking and knowledge.

Upon arrival, the team discovered the samples were being stored in many locations including on the 18th floor of one research center. BioStorage Technologies collaborated with the largest university biobank in the region along with many local volunteers to move thousands of biological samples and freezer contents to the ReloFleet vehicle and then transported these samples to offsite secure locations. Interim dry ice bunkers and supplies were brought in while the rescue team worked for many days around-the-clock to save the most critical samples.



Only half of companies have a crisis plan\*

\*2011 Crisis Preparedness Study Presentation, ©Burson-Marsteller | ©Penn Schoen Berland

**Results** While millions of dollars in research samples and life-saving research advancements were unfortunately lost due to this unexpected disaster, the rescue team's effort enabled hundreds of thousands of delicate biological samples to be saved.

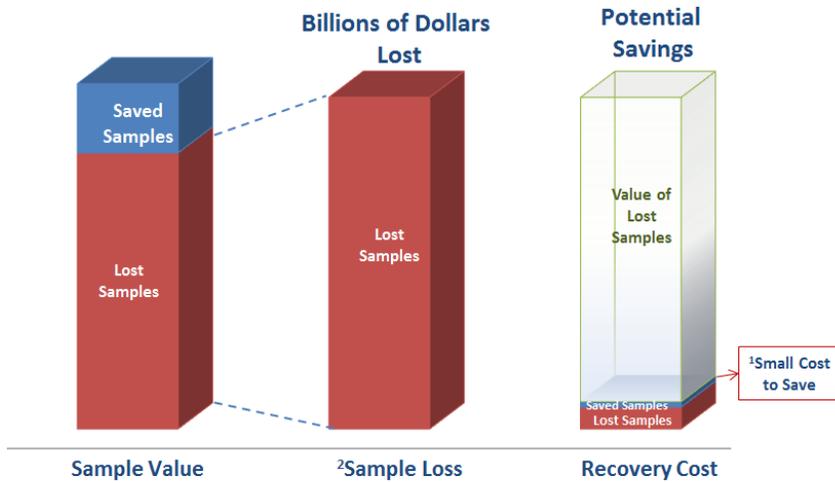
The Hurricane Sandy disaster emphasized the importance of a well-thought out and tested business continuity and disaster recovery plan for medical research institutions and their most crucial research samples. After the rescue mission, BioStorage Technologies is working closely with many university medical centers to develop the best biorepository disaster plans to mitigate risk in the event of a future hurricane or other disaster.

Key lessons from this disaster highlighted the importance of having a detailed sample inventory with asset prioritization, pre-planned suppliers, resource redundancies, and a backup plan for relocating samples and/or a strategy to store duplicate sample assets in another geographic area.

While not all the samples could be saved in the Hurricane Sandy disaster, the medical center community learned a valuable lesson and is now more prepared for future unplanned disasters. The learning from this disaster is being used by many other research organizations to support them in developing plans to mitigate their risk in the event of a disaster.

Below is an estimate quantifying the impact of the relief effort on the most critical samples (saved/lost) in the hurricane disaster.

### The Value of a Disaster Recovery Plan



<sup>1</sup>Estimated cost to save samples if an effective disaster recovery plan had been in place  
<sup>2</sup>Original sample value and replacement cost

#### About BioStorage Technologies:

*BioStorage Technologies, Inc. is the premier, global provider of comprehensive sample management solutions for the bioscience industry. Offering flexible onsite, offsite and hybrid models for the smartsourcing of research assets. BioStorage Technologies provides a complete life-cycle of sample management solutions. With an expert team of global sample consultants, industry-leading temperature-controlled storage facilities, innovative bioprocessing solutions and state-of-the-art technology solutions to support sample inventory and data virtualization, the company supports its customers in maximizing opportunities, minimizing risk and reducing costs.*