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RESEARCH PROTECTION

Principal Investigator Emergency Guide



Is your research **vulnerable** in an emergency?

Research is a critical element of what the university contributes to the world's body of knowledge and a major career component for faculty. It is also vulnerable to the impacts emergencies can have on campus operations. Principal Investigators must identify protection measures needed to mitigate potential disruption and loss to an emergency when developing research proposals. This guide is provided to help you consider the relevant issues and take steps to protect your research.



Identify

The first step is to identify what threats your research is vulnerable to:



Power: Identify critical equipment that is sensitive to power disruptions or surges such as lasers and X-ray diffraction devices or sub-80 freezers storing samples. Know what temperature tolerances are available.



Temperature: Identify research impacted by the loss of climate control in the building or room and the temperature tolerances.



Security: Identify special security requirements to protect against unauthorized access or established by a standard relevant to your research that must be met or that are needed to protect sensitive materials or high-value equipment.



Animals: Research with live animals is inherently vulnerable to a variety of emergency impacts. Identify all environmental conditions that could stress the animals and impact the results or threaten your population. These could include but are not limited to: power, temperature, noise, schedules/access, and security from radical groups.



Administration: Consider the impact of missing critical deadlines, loss of access to experiments, financial ramifications of losing samples, data, or research continuity.

Prevent

The best result would be for research to be resilient to the impacts of an emergency. Plan proactively to use the resources available.

- ▶ **Invest in back-up** UPS, generator power, and power outage notification system.

- ▶ **Communicate** with supporting departments about research vulnerabilities.
- ▶ **Ensure your data is backed up** in at least two independent locations.
- ▶ **Know the impact of supply chains** for animal sustainment, personal protective equipment, raw materials, cryogen (LN2/liquid helium), samples, equipment, etc. Know the replacement time and maintain on-hand supplies if necessary.
- ▶ **Request a security assessment** from UTPD.
- ▶ **Use space that is appropriate** for your research activities or that can be improved to be suitable.
- ▶ **Contact the offices of Emergency Management and Facilities Services** for assistance identifying your vulnerabilities and what protections are available for your research.

Mitigate

The nature of emergencies makes it impossible to control all the possible impacts. In severe cases, the best option is to mitigate the damage.

- ▶ **Keep your lab door and equipment signage** up to date and provide the Department of Environmental Health and Safety (EHS) with home/mobile number so that you can be reached by response personnel after hours. Post signage to protect against unauthorized entry if appropriate.
- ▶ **Anticipate and communicate** support needs based on the emergency impacts and anticipated recovery time.
- ▶ **If safe to do so** and within the response objectives, campus emergency workers may provide coordinated access to research.
- ▶ **Anchor equipment** and ensure chemicals are stored to mitigate spills during minor earthquakes.