Lessons learned:

A General Power Outage in a Lab Building

What happened?

A rat entered the faculty's main electrical cabinet on a Saturday night. The rat's fur began to smoke, setting off the smoke detection system, which in turn, shut off the entire building's power supply. The on-call electrician succeeded in fixing the outage only by switching between the building's main transformers. In the morning it turned out that the critical ("red") line power supply to the 4th floor wasn't resumed, because the detection system unplugged both the general supply of the building as well as the specific 4th-floor critical electricity line. As a result, freezers thawed, and research material was damaged.

What went wrong?

*** Other power supply switches flipped (besides the main one) and were not detected (located in other cells of the main electrical cabinet).**

*** The smoke detection integration was wired to the critical ("red") 4th floor electrical supply system (and not just to the building's main switch).**

*** Most of the PIs on the 4th floor didn't have operating alarm systems in their research freezers in the equipment room.**

What went right?

*** The cascade of reports notified all stake holders during the incident's night.**

*** The cellular-based alarm system that was attached to research freezers in the equipment room notified regarding the power outage and the increase in the freezer's temp. every hour.**

*** During inquiry, the faulty wiring of the smoke detection system to the critical 4th floor electricity line was detached and solved.**

How to prevent similar incidents in the future?

*** On-call electricians will look for secondary power switches that may have been flipped during a power outage in the same electrical cabinet they work on.**

*** Cellular-based alarm system controllers should be installed in every research freezer in equipment rooms harboring pivotal research material.**