



Resiliency looks different across every lab environment. Based on our project experience, these general guidelines illustrate how investment priorities and downtime tolerance can differ between research, production, and manufacturing. The goal is to provide a framework for planning the right level of protection.



RAYMOND DOYLE

Managing Director,
Science & Technology
rdoyle@wbengineering.com



**INVESTMENT IN
RESILIENCY**

R&D LABS

Low to moderate

CLINICAL TRIAL SUITES

High

**FULL SCALE
MANUFACTURING**

High to very high

**TOLERANCE FOR
DOWNTIME**

Hours to days

Minutes to hours

Seconds to minutes

**IMPACT OF
DOWNTIME**

Downtime affects research continuity, not patient outcomes.

Downtime impacts data integrity and regulatory timelines.

Downtime halts production and disrupts supply chains.

LOWEST RESILIENCY

HIGHEST RESILIENCY