Tech & Data-Centers: High Noise, Heat, and Site Access Hazards Stats and Facts

FACTS

1. **High Noise Exposure:** Server rooms, cooling systems, and backup generators can produce sustained noise levels that gradually damage hearing.
2. **Heat Stress Risk:** Data halls and mechanical rooms generate high ambient temperatures; prolonged exposure can cause dehydration, fatigue, and reduced cognitive performance.
3. **Restricted Egress:** Raised floors, cable trays, and narrow aisles can obstruct rapid evacuation during fire, smoke, or electrical incidents.
4. **Electrical Arc Hazard:** High-voltage panels, UPS systems, and battery banks present arc flash and shock risks during maintenance or troubleshooting.
5. **Battery & Chemical Exposure:** Lithium-ion and lead-acid battery systems can release hazardous gases or chemicals during failure or charging.
6. **Raised Floor Instability:** Removable floor panels may shift or collapse if improperly secured, creating trip and fall hazards.

STATS

- The Bureau of Labor Statistics reports thousands of annual workplace hearing loss cases, with high-noise environments like mechanical and equipment rooms contributing significantly (2022–2023).
- NIOSH estimates that 22 million U.S. workers are exposed to hazardous noise levels each year (National Institute for Occupational Safety and Health).
- Electrical contact incidents account for dozens of

fatalities annually in U.S. workplaces, including maintenance and utility operations within technical facilities (BLS).

- OSHA data show that electrical hazards, including arc flash and improper lockout, remain among the most frequently cited violations each year (Occupational Safety and Health Administration).
- In Canada, ambient physical risks (including high noise and extreme temperatures) affected 28.1% of workers frequently in 2024-2025, with manufacturing and utilities (encompassing data centers) at 65% exposure—higher than the national average.