

TECH EMPLOYERS' 5-STEP WORKPLACE SAFETY GUIDE FOR DEVELOPING AND OPERATING DATA CENTERS

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Tech Employers' 5-Step Workplace Safety Guide for Developing and Operating Data Centers

The rapid growth of data center development across the country presents workplace safety challenges that are very different from those found in a traditional office environment. The existence of high-voltage electrical systems, backup generators, sophisticated cooling equipment, confined spaces, and ongoing maintenance activities bring a host of safety obligations that many technology employers have not previously encountered. The good news is that companies that address these issues early are often in a much stronger position to protect their employees, avoid disruptions, and respond effectively if OSHA ever comes knocking. Below are five practical considerations for organizations developing, constructing, or operating data centers.

✦**KEY POINT:** These issues deserve attention at the leadership level. OSHA applies the same enforcement standards to data center owners and operators that it applies to manufacturers and construction companies. A serious injury, fatality, or catastrophic event will almost certainly trigger an inspection, and incidents involving high-profile facilities frequently receive heightened scrutiny.

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1. Begin with a Site-Specific Hazard Assessment

Every effective safety program begins with understanding the hazards unique to the workplace. That is particularly true in data centers, where electrical, thermal, mechanical, and atmospheric hazards often exist within the same facility. Generic corporate safety programs rarely capture those risks.

Your assessment should identify the hazards associated with each area of the facility, evaluate the likelihood and severity of employee exposure, and form the basis for engineering controls, administrative controls, and personal protective equipment (PPE). OSHA's PPE standard also requires employers to certify this assessment in writing.

- Complete the assessment before operations begin and revisit it whenever equipment, layouts, or processes change.
- Use the assessment to determine which written OSHA programs are actually necessary instead of adopting boilerplate policies.
- Conduct periodic audits to identify gaps before OSHA does.

2. Build Written Programs Before You Energize the Facility

Once you identify potential hazards, you should develop written safety programs that reflect how the facility actually operates. Depending on your operation, data centers may require lockout/tagout procedures, permit-required confined space programs, emergency action and fire prevention plans, hearing conservation programs, and other OSHA-required policies.

One of the most common mistakes we see during OSHA inspections is a beautifully written safety manual that bears little resemblance to what employees actually do. Regulators quickly identify those disconnects.

- Tailor written programs to actual operations rather than relying on generic templates.
- Train employees before they perform the work and retrain them when processes or equipment change.

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- Document all training. If you cannot demonstrate that training occurred, OSHA will often assume it did not take place.

3. Don't Overlook the General Duty Clause

Not every hazard in a modern data center is addressed by a specific OSHA standard. But that does not mean OSHA lacks authority to cite an employer. Under the General Duty Clause, employers must protect employees from recognized hazards that are likely to cause death or serious physical harm.

Heat exposure has become one of the most visible examples. Employees maintaining rooftop cooling equipment, generators, and exterior electrical systems may face significant heat-related hazards even though no federal heat standard currently exists. Several state-plan states also impose requirements that exceed federal OSHA's rules.

- Address significant hazards even when no specific OSHA standard applies.
- Develop [heat illness prevention procedures](#) for outdoor maintenance work, including water, rest, shade, and acclimatization.
- Monitor state-specific OSHA requirements for facilities operating in multiple jurisdictions.

4. Manage Construction-Phase Risk Carefully

The construction phase presents its own set of OSHA obligations. Beyond complying with the construction standards, companies should remember OSHA's multi-employer citation policy. Technology companies developing data centers are often surprised to learn they may face OSHA liability even when a general contractor manages day-to-day construction activities. Depending on the circumstances, the agency may cite the company that created the hazard, controlled the worksite, corrected the hazard, or exposed employees to it.

- Clearly allocate safety responsibilities in construction contracts while recognizing contracts alone will not eliminate OSHA exposure.
- Evaluate contractors' safety performance before awarding work.

- Be intentional about the level of safety oversight your organization will exercise during construction.

5. Treat Temporary and Contract Workers Like Your Own Employees

Most data center projects rely heavily on temporary workers and specialty contractors. OSHA generally expects the host employer to provide site-specific hazard training because the host controls the workplace. You should not assume staffing agencies have addressed those obligations.

- Clearly identify which organization is responsible for each aspect of employee training.
- Verify required certifications before work begins.
- Maintain complete training and qualification records so the facility remains inspection-ready.

Conclusion

If you have any questions, contact your Fisher Phillips attorney, the authors of this insight, or any member of our [Workplace Safety and Catastrophe Management Practice Group](#) or [Tech Industry Team](#) for guidance. Make sure you are subscribed to [Fisher Phillips' Insight System](#) to get the most up-to-date information on workplace safety issues.