



ACE ENVIRONMENTAL ADVISORY

HEALTHCARE CONSTRUCTION: MANAGING THE ENVIRONMENTAL RISKS

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Healthcare organizations often need to upgrade their facilities or build new ones to serve patients better, and to keep pace with advances in medical technology as well as evolving government regulations. When considering construction or renovation projects, healthcare organizations need to take special care to recognize and mitigate the environmental risks that such work poses to patients, staff and visitors.

The environmental risks associated with construction projects are amplified for healthcare facilities such as hospitals, outpatient centers, clinics and assisted living centers because of health issues patients may be facing. For instance, indoor air quality problems linked to construction may pose a modest risk for a healthy person, but for a patient with a compromised immune system, the reaction can be life threatening. To prevent those kinds of problems, healthcare organizations need to make sure that building projects are conducted in an environmentally sound manner that mitigates the potential environmental exposures. In addition, healthcare organizations need to consider the possibility of significant financial costs and reputational damage of an environmental incident and make sure that their risk management program includes the appropriate insurance for environmental exposures.

A frequent misconception is that general liability policies will provide coverage for environmental risks. Yet, such exposures typically have been excluded from general liability policies for more than two decades. For example, most general liability policies will have an absolute or total pollution exclusion and in some cases

general liability policies may exclude manganese (associated with welding fumes) and silica (associated with concrete or block). In those instances where general liability policies do provide some limited liability coverage for bodily injury or property damage, they typically will not cover the costs of remediation, which can be very expensive. To protect themselves from environmental claims, healthcare facilities can purchase a pollution liability policy that specifically covers those same liability risks along with the costs of remediation, decontamination costs and other expenses associated with an environmental incident, including expert help in crisis and reputation management.

Remediation costs can be substantial. For example, to address a mold problem arising from tainted ductwork may require shutting down a large area of the building or even the entire facility. A good deal of materials may have to be removed to access the ductwork, which may also have to be removed or cleaned by experts. All the waste material will have to be transported and disposed of in the appropriate manner. In addition, healthcare facilities that need to have a problem addressed right away can expect to pay premium prices for emergency response by environmental experts. Environmental incidents may require the involvement of Federal, state or local environmental agencies. Healthcare facilities will want to have an environmental expert representing them in their dealings with those agencies. In addition, because any environmental incident that is not managed properly can result in long-term damage to a facility's reputation, the organization may need to hire crisis management professionals. While the problem is being remediated, patients may have to be relocated and housed at another facility, adding to the expense and potential negative publicity.

Whether renovating or expanding an existing facility or building a new one, construction projects involve a wide variety of environmental risks resulting from the work itself, along with attendant risks that arise from the transportation and disposal of construction materials and debris. Some common exposures



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include fuel leaks or spills, and improperly installed heating, ventilation and air conditioning systems. Indoor air quality can be a major concern for health care facilities, and a wide variety of work can impact air quality, including welding, waterproofing, floor laminating or even carpet installation due to the formaldehyde in carpet fibers. Any work involving chemicals can cause potential problems. Potential environmental liabilities do not stop at the property line and may include fugitive emissions and exposures linked to waste disposal and transportation of construction materials and debris.

Renovation and expansion projects may exacerbate existing contamination by spreading mold, bacteria or viruses through heating, cooling, ventilation and water systems. Even environmentally friendly construction methods can present environmental risks. Because LEED (Leadership in Energy & Environmental Design) certified building techniques focus on energy efficiency, that is minimizing heat transfer, they also may tend to hold in and potentially concentrate pollutants. In addition, the exterior insulation finishing systems used in many modern buildings may present potential problems. Although such systems are designed to keep moisture out, water may still intrude through openings around windows, doors, vents and utility access points. Once moisture gets in, it may not be able to get out, which may give rise to mold.

To guard against environmental exposures during construction, health care facilities need to take a proactive approach. Before any renovation, repair or new construction project begins, it is crucial to assess the potential risks. For instance, construction may disturb existing building material that may have been subject to mold growth. Without proper containment measures, mold spores may be spread throughout the facility through the ventilation system. New technology can help identify areas where mold might be present before work begins, making it possible to mitigate the exposure first. Potential bacterial risks (e.g., legionella pneumophila), which are often linked to water systems, should be identified before any work begins and a hazard control plan developed and implemented.

Healthcare organizations should consider seeking a policy that includes not only bodily injury and property damage but also coverage for emergency response, catastrophe management and decontamination for a wide variety of environmental exposures, including mold and bacteria.



Among preventive measures, containment systems should be put in place to minimize the spread of contaminants found in many building materials. Those systems need to take into account the design of the particular facility. A containment system that ends at a dropped ceiling may still allow contaminants to spread in the space between that ceiling and the decking of the floor above. Other contingency steps may include back-up power systems to ensure that containment measures for dust are not disrupted by power outages or natural disasters. Containment systems should be tested before and during construction to make sure that they are operating correctly. When work involves plumbing and water systems, proper oversight and quality control measures should be implemented to prevent leaking systems that could lead to problems at a later time.

Healthcare organizations contemplating construction projects should consider bringing in outside experts at the beginning to develop strategies to identify and mitigate the environmental exposures throughout the project. Other issues that will likely require specialized expertise include emergency response, business continuity, environmental compliance, hazardous materials management, patient safety and industrial hygiene. Before acquiring a new facility or company, it may be prudent to consult with environmental experts to evaluate the environmental risks that may be associated with the transaction.

To make sure that they have adequate protection, healthcare organizations may want to consider an owner-controlled insurance program that provides pollution coverage for all construction activities at a particular facility, or at a group of facilities, as well as for the transportation and disposal of construction materials and waste. Such policies can provide coverage that is specifically targeted for construction and renovation projects at hospitals, outpatient facilities, clinics, laboratories and assisted living

operations. Owner-controlled policies can help facility owners and contractors prevent potentially expensive coverage gaps resulting from varying pollution-related exclusions in standard policies.

Healthcare organizations should consider seeking a policy that includes not only bodily injury and property damage but also coverage for emergency response, catastrophe management and decontamination for a wide variety of environmental exposures, including mold and bacteria. Because incidents at healthcare facilities are very likely to draw media attention, catastrophe management coverage normally covers expert public relations advice and services to prevent lasting damage to the reputation of the facility or the entire organization.

As healthcare organizations strive to keep pace with technological and medical advances, along with demographic shifts in the populations that the serve, they often find it necessary to renovate or expand their facilities or build new ones from the ground up. Because the environmental exposures associated with construction work can pose significant health risks to patients and others, it is crucial to take special care before and during the project. Before work begins, healthcare facilities need to develop a plan to identify and mitigate the environmental exposures, and then make sure those robust measures are put into practice throughout the project. Today, healthcare organizations can take advantage of specialized expertise to help with training, planning and managing projects to minimize the risk. In addition, the appropriate insurance coverage can ensure that they are covered for a wide variety of environmental risks during construction projects, and provide access to expert assistance in the event of an incident. That strategy provides protection for patients and for the entire organization.

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