

## RADIO RADIATION - ARE WE BEING ZAPPED?

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**Are we being injured by radio waves? Experts say that we are, and they can prove it. Scientific evidence is mounting, demonstrating the causal link between radio frequency (RF) radiation exposure and physical and cognitive (memory and learning) injuries.**

Although OSHA has only focused on the obvious and immediate injury of thermal burns, studies show that RF radiation exposure can cause nerve damage and behavioral disruption in laboratory subjects. (Behavioral disruption is the inability to perform learned behaviors.) The inability to perform learned tasks following RF radiation exposure proves the causal link between the exposure and behavior, cognitive and/or psychological injuries (e.g., depression, memory loss, mood and/or sleep disorders and impaired or diminished cognitive function).<sup>1</sup>

Recognizing RF radiation as a known health and safety hazard, the Federal Communications Commission (FCC) has established RF radiation regulations and human exposure limits to protect workers and the general public. It would be easy to prove that each and every day, painters, fire fighters, utility and maintenance workers, insurance inspectors, HVAC, roofers and other construction workers are being overexposed to RF radiation.

What about personal monitors? The purpose of RF radiation pocket protection monitors is to indicate when the wearer is being exposed to RF radiation fields that may exceed the FCC maximum permissible exposure (MPE) limits for an occupational controlled RF environment. Workers that use monitors and RF protective gear must be trained to work in RF environments. They must satisfy the FCC's criteria for being fully aware of the existence of RF hazards and able to exercise control over their exposure.

**The number (estimated 500,000) of operational cell antennas in the U.S. is likely to swell to one million in the next few years as the demand by business and individual users for ever more and faster communication grows.**

**What about warning signs? Warning signs are part of the current failed system and have been and continue to be insufficient in preventing RF over-exposure.** Very few signs are in place, and many have inconsistent wording; if present, they are usually located well away from the exposure zone. Most new antennas are on rooftops throughout cities and towns across America. Many new installations are considered stealth installations, where the antennas are hidden in structures to maintain the esthetics.

**This issue of *You Should Know* is one in a series of brief articles designed to keep our clients abreast of significant breaking news in the claim and loss control areas that could affect their operations or exposures. Additional information about this and other topics can be obtained from your Regional Strategic Outcomes Practice Associate.**



Why should the building owner worry where the cell antenna is located? Are they protected by the hold harmless and indemnification language contained in the lease? Our sources have reviewed countless antenna site leases. Below is a typical example of excerpts from an antenna site lease.

## **LESSEE'S INDEMNITY OBLIGATION**

LESSEE shall protect, defend, indemnify and hold LESSOR, its officers, representatives, agents and employees harmless from and against any and all claims asserted or liability established which arise out of or are in any manner directly or indirectly connected with this Lease or LESSEE'S occupancy, development, use, operation or maintenance of the Premises and all costs and expenses of investigating and defending against same, including without limitation reasonable attorney fees and costs; provided, however, that LESSEE'S duty to indemnify and hold harmless shall not include any claims or liability arising from the established active negligence, sole negligence or sole willful misconduct of LESSOR, its officers, representatives, agents and employees. LESSOR may, at its election, conduct the defense or participate in the defense of any claim related in any way to this indemnification. If LESSOR chooses at its own election to conduct its own defense, participate in its own defense, or obtain independent legal counsel in defense of any claim related to this indemnification, LESSEE shall pay all of the costs related

thereto, including without limitation reasonable attorney fees and costs.

## **LESSOR'S INDEMNITY OBLIGATION**

LESSOR shall protect, defend, indemnify and hold LESSEE, its officers, representatives, agents and employees harmless from and against any and all claims asserted or liability established which arise out of or are in any manner directly or indirectly connected with LESSOR'S development, active use or maintenance of the Sites, and all costs and expenses of investigating and defending against same, including without limitation reasonable attorney fees and costs; provided, however, that LESSOR'S duty to indemnify and hold harmless shall not include any claims or liability arising from the established negligence or willful misconduct of LESSEE, its officers, representatives, agents and employees.

*Contained within this faux masonry steeple are stealth RF radiation transmitting antennas. This photo was supplied to us by RF CHECK Inc.*



The language and reciprocal indemnification provisions don't resolve issues of responsibility or risk transfer, but rather ensure litigation between the landlord and tenant when a claim arises. THE CELL COMPANY can argue that a worker exposed to RF radiation at the site was brought to or permitted on the property by the landlord. In fact, THE CELL COMPANY was not, and is not, aware of all activities at antenna sites on a continuous 24/7 basis. Accordingly, the LESSOR was, or is, potentially guilty of active negligence vitiating the indemnification provision in favor of the LESSOR.

Of course, the LESSOR will argue that THE CELL COMPANY operation (RF transmissions) was the legal and proximate cause of the injury a worker may have sustained. Additionally, there are other representations and warrants that the LESSOR may assert. There is the standard representation relative to compliance with applicable laws and regulations, including those pertaining to RF emissions.

To complicate a legal dispute even further, insurers have started including electromagnetic field (EMF) exclusions in the policies they issue.

There is already a guide being developed for the plaintiff's bar to begin pursuing these RF radiation exposure cases. We see this area of RF radiation exposure as having high potential for creating mass tort litigation.

**What is the best response to this issue? The quicker we move to establish national safety protocols the sooner we will stop adding potential claimants and reduce the significant financial liability to the stakeholders.** We believe two key items must be addressed to ensure worker safety:

1. Development of a national accessible registry of cell antenna sites, identifying the location and exposure zones throughout North America. Work on this has started by RF CHECK, Inc. The registry will be similar to the "Call 1-800 - xxx xxxx before you dig" utility locator services. The RF CHECK solution is establishing a new, currently nonexistent standardized RF safety protocol. It is characterized by a layered patented RF safety system that supplies all workers with the necessary information to educate and protect themselves from RF radiation over-exposure.
2. RF radiation is an invisible threat with latent, delayed bodily injury potential; therefore, there is an urgent need for everyone who could suffer financial or physical injury from RF over-exposure to understand the characteristics, hazards and the FCC human RF exposure regulations associate with RF emissions.

## CONTACT

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<sup>1</sup> "Behavioral and Cognitive Effects of Microwave Exposure," *Bioelectromagnetics*. Volume 24, Issue S6, 2003. John A. D'Andrea, Eleanor R. Adair, John O. de Lorge. Pp. S39-S62  
<http://www3.interscience.wiley.com/cgi-bin/fulltext/106565260/PDFSTART>

*The observations, comments and suggestions we have made in this report are advisory and are not intended nor should they be taken as legal advice. Please contact your own legal adviser for an analysis of your specific facts and circumstances.*