

8. Summary

In summary, construction employers and their employees should be concerned about RF radiation if they perform work on rooftops, sides of buildings, or on structures where telecommunications equipment is present because:

- RF radiation is invisible, it cannot be seen, smelled, or touched.
- RF radiation devices come in different shapes and sizes, and some are intentionally concealed for aesthetic reasons.
- Power levels generated by these devices vary - levels can be well below the FCC's MPE limits when work begins and then spike to dangerous levels without warning.
- The risk increases with the number of devices present, the closer a worker is to the device(s), and the more time that is spent in close proximity.
- Symptoms of the thermal effects of overexposure are often attributed to strenuousness of the work or a non-occupational illness.
- RF radiation may interfere with medical devices such as pacemakers.
- There is limited research on the long-term health effects of RF radiation and possible non-thermal effects of occupational exposure to RF. None is currently available for construction occupations.

To determine if RF generating devices are present:

- Look for signs and/or barriers
- Ask the building owner or site manager if antennas are present and their locations, and request the RF radiation surveys required by the FCC.
- If signs and RF Radiation surveys are not available, conduct your own pre-task safety assessment. If you are unsure about your potential exposure, use a personal monitor and wear protective clothing.

If work needs to be performed within a potentially hazardous area:

- Check the site survey or plot plan for potential exposure levels
- Pre-plan work tasks and travel routes so you can limit trips through the RF field and time spent on tasks there – the goal is to get in and out as quickly as possible
- Contact the building manager and the antenna licensee to have the equipment powered down or moved. Do not begin work until you receive verification that the antenna has been powered down or moved.

If the device owner and building owner are unresponsive:

- Contact the FCC to file a complaint – 1-888-225-5322 (press 5)
- Use personal monitors while work is being performed and if an alarm sounds, stop work and leave the area immediately
- If work must be performed in a potentially hazardous area, use personal monitors and protective clothing.

Employers should train their employees to:

- Understand the hazard
- Recognize devices
- Follow the instructions on signs and barriers
- Stay away from antennas -- never touch an antenna, do not stop in front of or close to an antenna, or take breaks on the rooftop where antennas are present
- If signs and barriers are not available, stay at least 6 feet away from a single antenna and at least 10 feet away from a cluster of antennas
- Use personal monitors and protective clothing properly if work cannot be performed a safe distance from the antenna(s)
- Recognize the symptoms and understand the risks associated with wearing a pacemaker or other medical device.

Both employers and employees should know what to do and where to go if they suspect they are in danger.

- Leave the work area immediately

Workers should know to:

- Contact their supervisor
- Contact their union

Employers should know to:

- Contact the building managers and the antenna licensee to have the equipment powered down or moved, and, if they are unresponsive, to contact the FCC to file a complaint.