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## NATIONAL ANTENNA & TOWER Safety Center

1. Historically, cell phones have been the main source of human exposure to RF radiation. However, as the demand for wireless services has increased, the number of base station cell antennas has grown exponentially. Base station cell antennas that were previously only located on remote towers are now ubiquitous and being installed in the sides of buildings and on rooftops. To reflect this development, consider modifying the following section on Page 20. Modifications are highlighted in red.

Cell phones and other commonly used wireless communication devices transmit their signals via RFR to enable voice calls and data transfer, including communication through the internet. Wireless phones are two-way radios that contain both a receiver and a transmitter. When a user makes a call, voice sound is converted into digital information. The information is imposed on to RFR and transmitted to the nearest base station. Base stations, commonly referred to as cell towers, host antenna systems. Antennas have historically been placed on towers that are free standing or mounted on existing structures such as trees, water tanks, or tall buildings, but as the public's demand for wireless services have increased, antennas are being placed in closer proximity to communities on rooftop structures, embedded in sides of buildings, or disguised behind faux chimneys. These facilities contain electronic equipment and antennas that receive and transmit RF signals and form a bridge to the rest of the communications infrastructure....

2. While these locations are not generally accessible by the public, building maintenance personnel, firefighters, and third-party workers such as electricians, painters, HVAC technicians, among others, may be in close proximity to these antennas while performing their duties, which would place them at exposure levels that range from the NTP study's low levels to significantly above the current safety limits. Consider adding the following paragraph to the *Sources, Use, and Human Exposure* section of the report.

While not affecting the general public, base station RF emitting antennas that have been embedded in sides of buildings or mounted on rooftops are located where firefighters and third-party workers such as electricians, painters, HVAC technicians, among others can be exposed to levels that exceed currently defined safety limits.

For further background information: www.natsafetycenter.org