

CONNECTIVITY SOURCE
HELP Project Summary
(Hearing Effectiveness Leadership Program)

Background: What you need to know about cell phones and hearing aids.

Hearing aid wearers may experience audible interference when using a digital wireless telephone due to radio frequency (RF) emissions from the phone, regardless of whether acoustic (microphone) or inductive (telecoil) coupling is used. RF interference does not occur for all combinations of digital wireless telephones and hearing aids. However, when interference does occur, the buzzing sound can make understanding speech difficult, communication over cell phones annoying and – in the most severe cases – render the phone completely unusable to the hearing aid wearer. When a wireless phone is in communication with its network, an electronic field is present around the phone’s antenna. During communication over a digital wireless phone this field pulses. It is this pulsing energy that may be picked up by the hearing aid’s microphone or telecoil circuitry and heard as buzzing sound interference through the wearer’s hearing aid. Telecoil users may also experience electromagnetic (EM) interference which originates from the cell phone’s electronic elements such as its backlighting, display, keypad, battery and circuit board.

FCC Ranking:

Acoustic coupling to a hearing aid’s microphone rated M3 (good) and M4 (excellent) allows you to know that the cell phone has been rated and tested to established and mandated standards.

Inductive coupling to a hearing aid’s telecoil rated T3 (good) and T4 (excellent) allows you know that the cell phone has been rated and tested to established and mandated standards.

Please note: Individuals are urged to “Try before you buy”, regardless of compatibility ratings.

Need:

It is presently estimated that there are approximately eight (8) million hearing aid wearers in the United States. This market is growing exponentially as the “Baby Boomer” generation reaches old age. As we are all aware, wireless phones are becoming more and more important in our everyday lives – for business, keeping in touch with friends, family and safety. Hearing aid wearers want to enjoy and participate in utilization as an equal with compatibility.