California Health Department Raises Questions About Cell Phone Cancer Risk

State issues recommendations for reducing cell phone radiation exposure but says there's no scientific consensus about risk.

December 18, 2017 By Liz Highleyman

The California Department of Public Health (CDPH) last week released guidance for minimizing exposure to radio frequency (RF) energy from cell phones, renewing debate about whether the ubiquitous devices can raise the risk of brain tumors or other types of cancer.

"Although the science is still evolving, there are concerns among some public health professionals and members of the public regarding long-term, high-use exposure to the energy emitted by cell phones," CDPH director Karen Smith, MD, MPH, said in a statement. "We know that simple steps, such as not keeping your phone in your pocket and moving it away from your bed at night, can help reduce exposure for both children and adults."

Estimates suggest that around 95 percent of Americans own a cell phone and children now get their first phone at age 10, on average. Many people keep their phones near them most of the day and at night while they sleep.

Major U.S. cancer organizations including the National Cancer Institute and the American Cancer Society say that cell phones are not a recognized cancer risk factor. The World Health Organization's International Agency for Research on Cancer classifies electromagnetic fields produced by mobile phones as "possibly carcinogenic" to humans, but the agency says, "To date, no adverse health effects have been established as being caused by mobile phone use."

Because it would be difficult—and perhaps unethical—to assign similar groups of people to use or not use cell phones in a randomized study, experts rely on laboratory and animal research and epidemiological comparisons.

According to the National Cancer Institute, low- to medium-frequency electromagnetic fields (such as those produced by power lines, Wi-Fi devices or cell phones) do not cause DNA damage that can lead to cancer, unlike high-frequency ionizing radiation (such as X-rays or ultraviolet radiation from the sun), which is powerful enough to knock electrons off atoms.

Large epidemiological studies that included hundreds of thousands of participants (notably the INTERPHONE, Danish cohort and Million Women studies) have not shown an association between cell phone use and increased cancer incidence. Some smaller studies have seen inconsistent links between cell phones and certain types of brain tumors. Cell phone safety skeptics point out that large numbers of people have been using cell phones for only 10 to 15 years, and some cancers take longer than that to develop.

So for now, some agencies aren't taking a definitive stance.

"There is no scientific evidence that provides a definite answer" to the question of whether using a cell phone causes cancer, according to the Centers for Disease Control and Prevention. "At this time, we do not have the science to link health problems to cell phone use."

The new California guidance likewise doesn't take a position on the link between cell phone use and cancer and other health concerns, leaving it up to individuals to decide whether they wish to take precautions.

"These studies do not establish the link definitely, however, and scientists disagree about whether cell phones cause these health problems and how great the risks might be," the guidance states. "This document is intended to provide guidance for those people who want to reduce their own and their families' exposures to RF energy from cell phones, despite this uncertainty."

The recommended precautions include:

- Keep cell phones away from your body, for example by using the speaker or texting instead of holding the phone near your head.
- Carry cell phones in a bag, briefcase or purse rather than in a pocket or bra.
- Use earphones or a headset, but remove wireless headsets when not taking a call as these emit a small amount of RF energy even when the phone is not in use.
- Reduce or avoid cell phone use when the signal is weak—showing only one or two bars—because the phone puts out more RF energy when trying to connect to a cell tower.
- Avoid using your phone in a moving car or train because it emits more RF energy as it switches from one cell tower to the next.
- Instead of streaming audio or video files, download them before watching or listening.
- Keep your phone away from your bed while you sleep, unless it is off or in airplane mode.
- Avoiding products that claim to block or shield radiation, as these can make phones emit more RF energy and may actually increase exposure.

Smith suggested that the unquantifiable risk of cell phone exposure may be higher for children, thus warranting greater caution.

“Children’s brains develop through the teenage years and may be more affected by cell phone use,” Smith said. “Parents should consider reducing the time their children use cell phones and encourage them to turn the devices off at night.”

The release of the California guidance stems at least in part from a lawsuit spearheaded by Joel Moskowitz, PhD, a professor at the University of California Berkeley School of Public Health, who thinks the public is not being adequately informed about the risks of cell phones. Moskowitz, along with First Amendment activists, sued CDPH after it rejected his public records request for an earlier version of the guidance.

The health department argued that the guidance could “needlessly confuse and possibly alarm” the public. Plus, the department’s brief added, cell phone manufacturers are part of the public and they have no interest in dissemination of the document. In March, a superior court judge ruled in Moskowitz’s favor and ordered that the document be released.

Click here to read the California Department of Public Health guidance.

Click here to read the National Cancer Institute’s fact sheet about cell phones and cancer risk.

Click here to read the American Cancer Society’s overview of cell phones and cancer risk.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.cancerhealth.com/article/california-health-department-raises-questions-cell-phone-cancer-risk