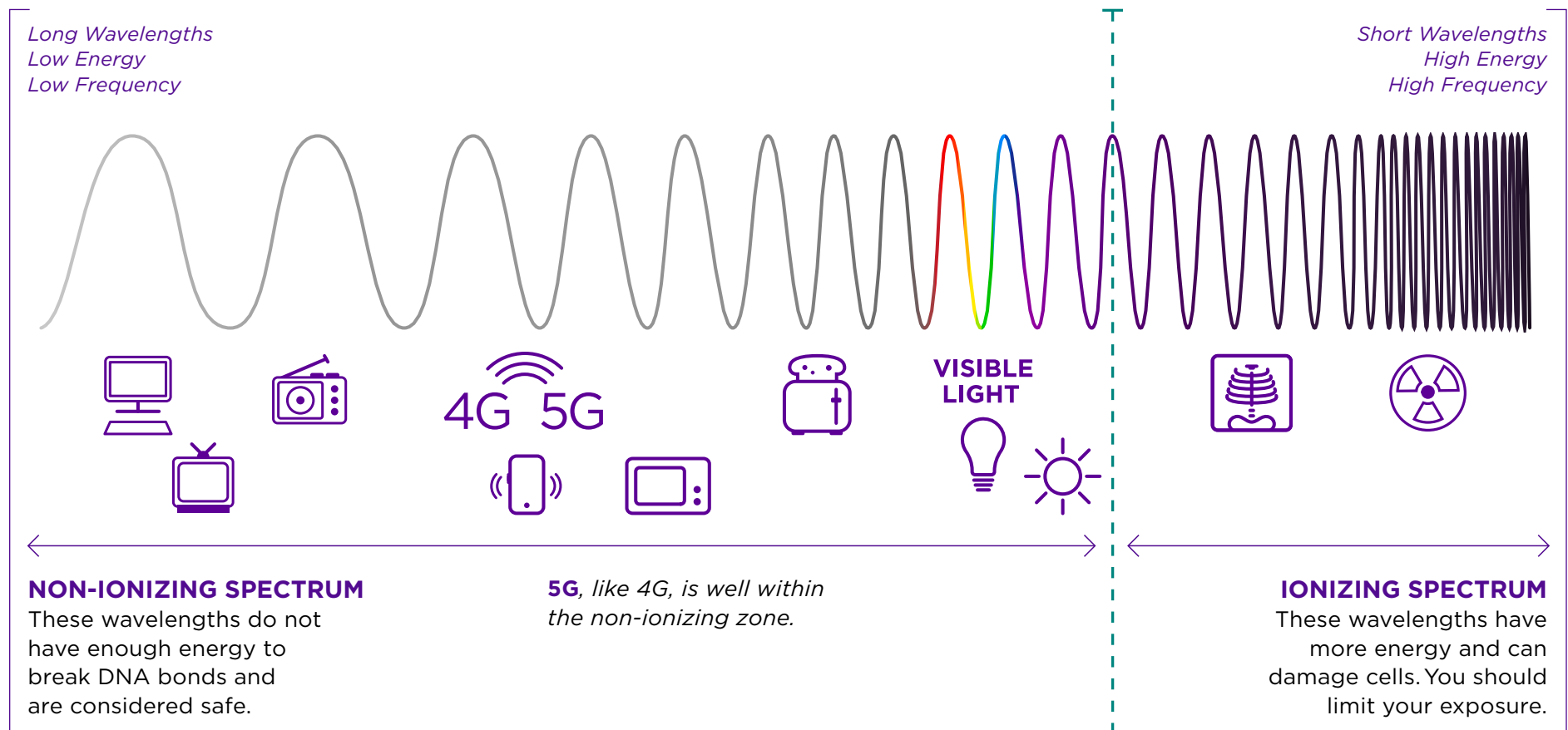


# Understanding the safety of 5G.

You've probably heard a lot about new 5G networks, and it's only natural to wonder about their safety. Much like the signals for your TV, radio or wi-fi router, 5G travels to your device using electromagnetic energy—one of the most ubiquitous and well-studied phenomena in the universe.

## Where 5G fits on the electromagnetic spectrum.



## 5G builds on 4G.

5G is the next generation of wireless technology, but it works pretty much the same as current 4G networks. To expand 5G throughout the country, carriers are working hard to expand small cells and fiber. The good news is that over **154,000 small cells are already deployed**<sup>1</sup> throughout the US—powering many of the 4G and LTE networks in use today.

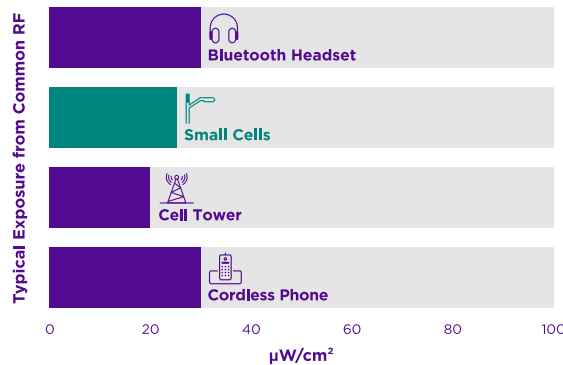


**Small cells** are low-powered, fiber-connected nodes that are usually located on existing structures like streetlights and utility poles.

[Read More](#) →

## Low power minimizes exposure.

We're constantly surrounded by electromagnetic energy. Whether you're talking about 5G, 4G or your Bluetooth headset, the physics are the same, and the body's response is essentially identical. You can see in this chart how emission levels from small cells compare to other common radio frequencies (RF)—all many times below what the FCC considers safe.



Source: © 2018 Andrew H. Thatcher, Board Certified Health Physicist.

## The research is clear.

The consensus of seven decades of research by worldwide health and safety organizations is that electromagnetic emissions at the levels allowed by FCC regulations are safe.

**We encourage you to take a deeper dive if you'd like to know more.**

### The 5G Health Hazard That Isn't.

The *New York Times* shows how misinformation about wireless technologies has spread. [Read More](#) →

### Research on Cell Signals and Cancer.

The **American Cancer Society** provides a good summary of the available research and findings. [Read More](#) →

## Key takeaways.

- 1 Studies show that cellular signals—including 5G—are safe.
- 2 5G is the next generation of cellular networks and builds on 4G.
- 3 5G emissions are similar to those from everyday technologies like TV, radio, wi-fi—even your toaster.

“The light produced by a light bulb is a form of electromagnetic radiation with energy and frequency that is approximately 17,000 greater than that of the highest frequencies used by 5G.”

Dr. Jerrold Bushberg,  
Vice Chair of COMAR and Clinical Professor,  
Radiology & Radiation Oncology, University  
of California, Davis School of Medicine

<sup>1</sup><https://www.ctia.org/infrastructure-channel>