

# Collateral Damage

A DANGEROUS AND INSIDIOUS LEGACY OF THE WIRELESS TECHNOLOGY EXPLOSION

## Part 1 of a 2 Part Series

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### *COLLATERAL DAMAGE:*

#### *United States Air Force Intelligence Targeting Guide:*

*Unintentional damage or incidental damage affecting facilities, equipment, or personnel, occurring as a result of military actions directed against targeted enemy forces or facilities. Such damage can occur to friendly, neutral, and even enemy forces.*

#### *United States Department of Defense:*

*Unintentional or incidental injury or damage to persons or objects that would not be lawful military targets in the circumstances ruling at the time. Such damage is not unlawful so long as it is not excessive in light of the overall military advantage anticipated from the attack.*





Example:

*In an interview before his execution, convicted U.S. bomber (and Gulf War veteran) Timothy McVeigh referred to the deaths of 19 children killed in the government office building during the Oklahoma City bombings as “collateral damage”.*

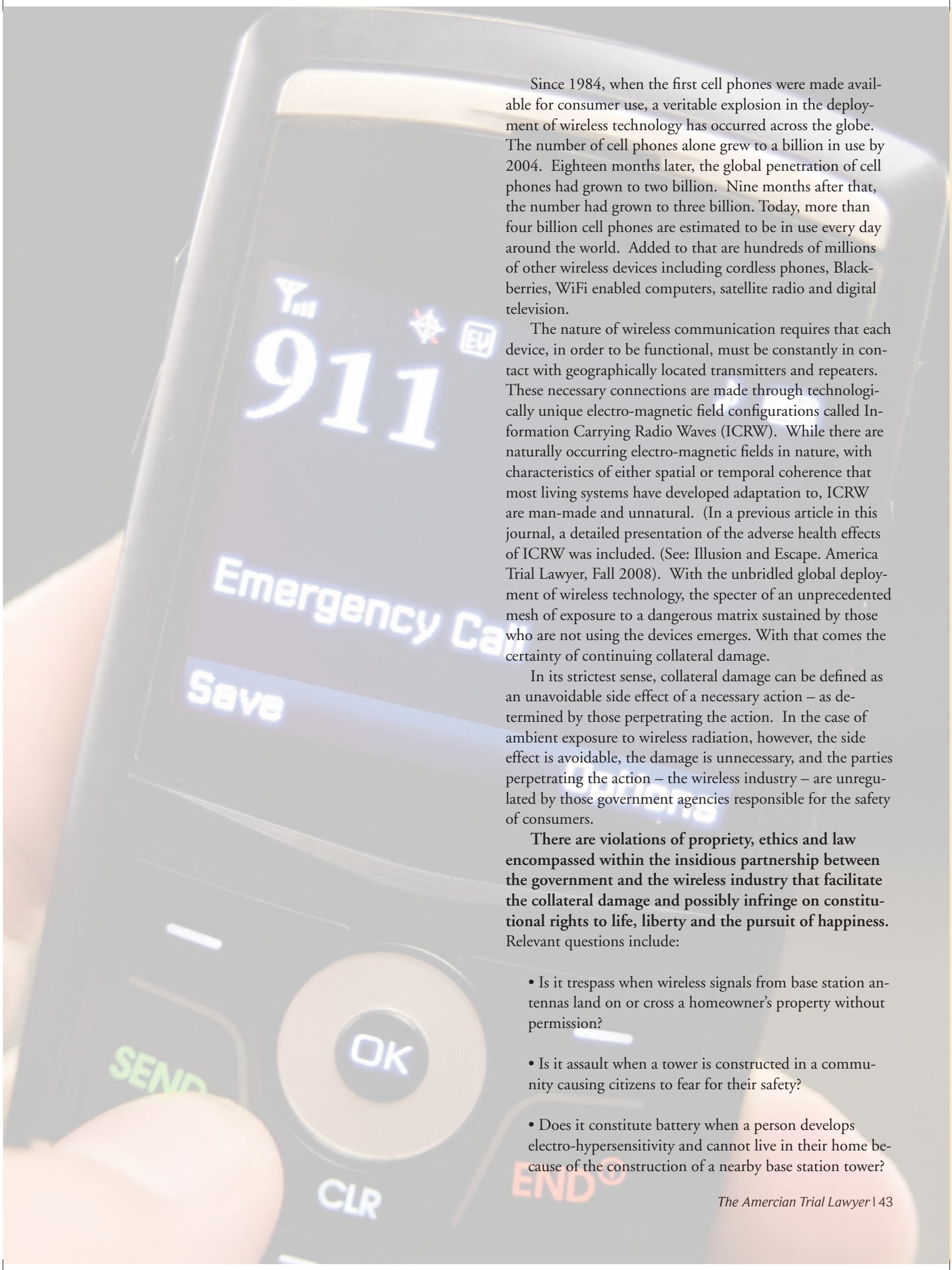
*Since the Cold War, the U.S. government has known that microwaves are genetically hazardous. Beginning in 1953 and continuing intermittently for about three decades, the Russian Soviets used microwaves to covertly attack the U.S. embassy staff in Moscow, Russia. The ongoing irradiation campaign affected about 1,800 employees and 3,000 dependents housed at the embassy during this period. The Russians targeted the U.S. embassy with 2.4 to 4.1 gigahertz, a range within the same realm of frequencies blasting from America’s wireless cell phones, in-house cordless phones, wireless computers, WiFi systems and cell towers. In the mid 1970s, a Johns Hopkins medical team under direction of Dr. Abraham Lilienfeld was commissioned by the U.S. State Department to study*

*the health effects of the Moscow irradiation on our embassy staffers. The draft report documented numerous symptoms of radiation poisoning, including immune system disorders, high white blood cell counts, chronic fatigue, blurred vision, cataracts and muscle aches. Information on cancer was deliberately withheld from the Lilienfeld team, but it was later reported that cancer incidence among embassy staff was four times normal... reproductive problems among the irradiated Moscow personnel included abnormal red and white blood cells, above average chromosomal aberrations, higher than normal rates of miscarriage plus pregnancy complications. Embassy staff with blood abnormalities were advised not to conceive children until six months after their somatic levels had returned to normal in a non-irradiated environment. It should also be noted that then U.S. State Department chief medical officer Herbert Pollack sanitized the conclusions of the Lilienfeld report. The final report falsely concluded that no important health effects were associated with the embassy microwave exposure.*

*Amy Worthington  
The Idaho Observer*

AMERICANS LOVE WIRELESS GADGETS. AND THE TRILLION DOLLAR WIRELESS INDUSTRY LOVES THAT AMERICANS LOVE THEIR WIRELESS GADGETS. The security flap over President Obama's desire to keep his Blackberry while in office was a top-level illustration. And while the Food and Drug Administration, Federal Communications Commission, Federal Trade Commission and Environmental Protection Agency continue a decades-long double-talk about wireless safety that rivals Abbott and Costello's Hall of Famed 'Who's on First?' routine, unsuspecting consumers are blindly absorbing the *collateral damage*.





Since 1984, when the first cell phones were made available for consumer use, a veritable explosion in the deployment of wireless technology has occurred across the globe. The number of cell phones alone grew to a billion in use by 2004. Eighteen months later, the global penetration of cell phones had grown to two billion. Nine months after that, the number had grown to three billion. Today, more than four billion cell phones are estimated to be in use every day around the world. Added to that are hundreds of millions of other wireless devices including cordless phones, Blackberries, WiFi enabled computers, satellite radio and digital television.

The nature of wireless communication requires that each device, in order to be functional, must be constantly in contact with geographically located transmitters and repeaters. These necessary connections are made through technologically unique electro-magnetic field configurations called Information Carrying Radio Waves (ICRW). While there are naturally occurring electro-magnetic fields in nature, with characteristics of either spatial or temporal coherence that most living systems have developed adaptation to, ICRW are man-made and unnatural. (In a previous article in this journal, a detailed presentation of the adverse health effects of ICRW was included. (See: Illusion and Escape. American Trial Lawyer, Fall 2008). With the unbridled global deployment of wireless technology, the specter of an unprecedented mesh of exposure to a dangerous matrix sustained by those who are not using the devices emerges. With that comes the certainty of continuing collateral damage.

In its strictest sense, collateral damage can be defined as an unavoidable side effect of a necessary action – as determined by those perpetrating the action. In the case of ambient exposure to wireless radiation, however, the side effect is avoidable, the damage is unnecessary, and the parties perpetrating the action – the wireless industry – are unregulated by those government agencies responsible for the safety of consumers.

**There are violations of propriety, ethics and law encompassed within the insidious partnership between the government and the wireless industry that facilitate the collateral damage and possibly infringe on constitutional rights to life, liberty and the pursuit of happiness. Relevant questions include:**

- Is it trespass when wireless signals from base station antennas land on or cross a homeowner's property without permission?
- Is it assault when a tower is constructed in a community causing citizens to fear for their safety?
- Does it constitute battery when a person develops electro-hypersensitivity and cannot live in their home because of the construction of a nearby base station tower?





- Are there infringements on regulatory policing powers as derived from the constitutional Commerce Clause expected by consumers to be protective?
- Is it criminal or fraudulent inducement to force consumers to sign long-term service contracts that in effect force ongoing exposure to dangerous radiation?
- Are packages that contain wireless devices with misleading data about safety violations of 'truth in advertising' statutes?
- Is it assault and battery to require students to sit in classrooms in schools outfitted with WiFi where parents voice objections?

As these legal questions are sorted out in the coming years, consumers remain in a very difficult situation. The enormity of the problem is lost on most people as they occupy themselves with the toils of their everyday lives. Those challenges lead to consumer complacency as they are led blindly by provocative and often false advertising about the value and necessity of "all things wireless."

And, no one is spared. The potential for this collateral damage reaches even to the President of the United States, his family and those hundreds of Americans who work with him in the White House complex.

#### EXPOSURES AT THE WHITE HOUSE

According to [www.antennasearch.com](http://www.antennasearch.com), there are 76 wireless transmission base station towers located within one mile of The White House: 1600 Pennsylvania Avenue, N.W., Washington, D.C. Of these active towers within that radius, only five are registered. Seventy-one of those towers are un-registered and therefore unregulated and possibly illegal.

Seven hundred fifty-six wireless transmission antennas are located on the 76 towers within one mile of The White House. The nearest antenna is just .09 miles from the center of the house where the leader of the free world and his family reside. Each antenna is authorized to emit up to 100 Watts of power per signal. A tower with ten antennas would therefore emit up to 1000 Watts of power. Wattage determines the strength of the electromagnetic field plume emitted and thus the degree of penetration into bodies of those men, women and children who come between the antenna and its cell phone partner.

The array of towers and antennas located around 1600 Pennsylvania Avenue represents one of the most dense and severe ambient exposures to dangerous Information Carrying Radio Waves anywhere in the world.

It is noteworthy – and astonishing to most consum-

ers – that in the United States and most western countries, the delivery of wireless technology is not regulated for safety. While the Federal Communications Commission (FCC) claims jurisdiction with respect to issuing emission guidelines, that agency has no statutory health and safety function – and no regulatory enforcement abilities should public health problems be found. The agency with safety responsibility, the Food and Drug Administration, has “been missing in action” since 1999, when it became clear that its only regulatory recourse for wireless technology dangers was banning the technology – deemed by the FDA to be a politically impossible approach.

The dense infrastructure that includes towers and antennas has been argued by the wireless industry as a “necessity” for the delivery of wireless technology as it is currently engineered. This assertion is false. There are alternatives that could be incorporated into the nation’s infrastructure and education system re-building efforts espoused by President Obama’s administration, such as maximizing fiber optic infrastructure in place of wireless. However, wireless technology as it currently exists, carries with it significant risk of collateral damage – much of it literally in the President’s own backyard.

## DIRECT IMPACT ON HUMAN HEALTH

A distinguishing aspect of collateral damage caused by the unbridled and unregulated expansion of the wireless technology infrastructure is the wide range of conditions that have been linked to the related exposures being incurred by those not using wireless devices themselves. The context is similar to that of second-hand smoke, but the complexity is greater. The public health and regulatory systems in the United States are based on paradigms that are limited by the “one exposure/one disease” causal theory. Exposure to ICRW and other forms of electro-magnetic fields have now been shown to manifest different adverse impacts in different people through pathological mechanisms derivative of persistent oxidative stress. As such, public health

officials have their hands tied with respect to implementing intervention controls. Thus, the public health system is not capable of effectively protecting the public from these hazards.

The science defining the health hazards of wireless technology has been accumulating for two decades; however, the public relations machinery of the wireless industry continues to keep the public’s perception of the problem as nil. Against this backdrop of industry control, an independent and comprehensive scientific compendium of the dangers to health associated with exposures to this type of

## CLINICAL OBSERVATIONS AND AD HOC STUDIES OF PEOPLE LIVING IN PROXIMITY TO BASE STATION ANTENNAS PRESENT A GROWING DATABASE INDICATIVE OF ADVERSE PUBLIC HEALTH IMPACT AND FUNCTIONAL IMPAIRMENT.

ambient radiation, penned by a dozen of the world’s top experts on electro-magnetic radiation dangers, was released in September 2007. Their conclusions:

- Daily exposure to electro-magnetic fields are likely to be harmful to your health.
- The existing FCC and international limits for public and occupational exposure to electromagnetic fields and radiofrequency radiation are not protective of public health.
- Biologically-based exposure standards are needed to prevent disruption of normal body processes.
- Adverse effects of exposure include: DNA damage (genotoxicity that is directly linked to integrity of the human genome); disruption of cellular communication, cellular metabolism and repair; neurological effects including changes in brainwave activity during cell phone calls; impairment of memory, attention and cognitive function; sleep disorders; cardiac effects; changes in immune function including allergic and inflammatory responses; and brain tumors.

(Credit: The BioInitiative Working Group, [www.bioinitiative.org](http://www.bioinitiative.org)).

The consensus among these and other scientists around the world is that the risk of these impairments and conditions is greatest in children and teenagers. This derives from the fact that until around the age of 21, biological tissues are differentiating more than they are proliferating – this means that genetic material is more vulnerable in children. Thus, ICRW exposures to children are more serious than to adults and indeed several governments in Europe and Asia have taken steps to reduce exposures in children. (*See: Illusion and Escape, American Trial Lawyer, Fall 2008*).

Clinical observations and *ad hoc* studies of people living in proximity to base station antennas present a growing database indicative of adverse public health impact and functional impairment.

Included in these reports are instances of severe cognitive dissonance, inability to focus, short and long-term memory loss, erratic and irrational behavior, and bouts of uncontrollable anger and paranoia.

The evidence now suggests that there is no escaping the biological responses triggered by exposures to ICRW – there is no threshold of exposure below which the oxidative stress responses do not occur. However, it is clear that adverse effects do not occur in all of those exposed. The biological response appears to accrue adaptation in the exposed person that can lead either toward disease or resistance. The game of chance is in predicting the direction of the biological impact given exposure. Especially with respect to young children, use of wireless devices is a dangerous roll of the dice.

*Collateral damage* is not confined only to human biological responses triggered by exposures to ICRW. Instead, the damage is far-reaching, affecting humans, animals, and the long-term survival of our very environment. Part II of this article will address the potential destruction of our food supply as one consequence of ICRW exposure and suggest ways to reverse the damage.