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The Radiation Poisoning Of America

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Prior to 1996, the wireless age was not coming online fast enough, primarily because communities had the authority to block the siting of cell towers. But the Federal Communications Act of 1996 made it nearly impossible for communities to stop construction of cell towers "even if they pose threats to public health and the environment. Since the decision to enter the age of wireless convenience was politically determined for us, we have forgotten well-documented safety and environmental concerns and, with a devil-may-care zeal that is lethally short-sighted, we have incorporated into our lives every wireless toy that comes on the market. We behave as if we are addicted to radiation. Our addiction to cell phones has led to harder "drugs" like wireless Internet. And now we are bathing in the radiation that our wireless enthusiasm has unleashed. Those who are addicted, uninformed, corporately biased and politically-influenced may dismiss our scientifically-sound concerns about the apocalyptic hazards of wireless radiation. But we must not. Instead, we must sound the alarm.

Illa Garcia wore jewelry the first day she went back to work as a fire lookout for the state of California in the summer of 2002. The intense radiation from dozens of RF/microwave antennas surrounding the lookout heated the metals on her body enough to burn her skin. "I still have those scars," she says. "I never wore jewelry to work after that."

Likely Mountain Lookout, on U.S. Forest Service land with a spectacular view of Mount Shasta, is one of thousands of RF/microwave "hot spots" across the nation. A newly-erected cellular communications tower was only 30 feet from the lookout. "One antenna on that tower was even with our heads," recalls Garcia. "We could hear high-pitched buzzing. There were also three state communications antennas mounted on the lookout, only 6 feet from where we walked. We climbed past them every day."

Motorola company manuals for management of communications sites confirm that high frequency radiation from these antennas is nasty stuff. Safety regulations mandate warning signs, EMF awareness training, protective gear, even transmitter deactivation for personnel working that close to antennas. Garcia and co-worker Mary Jasso were never warned about the hazards. This, they say, demonstrates extreme malfeasance on the part of agencies and commercial companies responsible for their exposure.

By the end of fire season, Garcia and Jasso were so ill they were forced to retire and the lookout was closed to state personnel. Garcia, 52, is now severely disabled with fibromyalgia, auto-immune thyroiditis and acute nerve degeneration. Medical tests confirmed broken DNA strands in her blood and abnormal tissue death in her brain.

Dr. Gunner Heuser, a medical specialist in neurotoxicity, states that Garcia's disorders are a result of chronic electromagnetic field exposure in the microwave range and that "she has

become totally disabled as a result." Dr. Heuser wrote, "In my experience patients develop multisystem complaints after EMF exposure just as they do after toxic chemical exposure."

Jasso, who worked the lookout for 11 seasons, is also disabled with brain and lung damage, partial left side paralysis, muscle tremors, bone pain and DNA damage. Jasso discovered that all lookouts who worked Likely Mountain since 1989 are disabled. At only 61 years of age, she has lost so much memory that she cannot remember back to when her first three children were born. She fears that communications radiation may be a major factor in the nation's phenomenal epidemics of dementia and autism.

Both women say they have been unjustly denied worker's comp and medical benefits. Their pleas for help to state and federal agencies have been fruitless. Between them they have racked up over $150,000 in medical bills, although there is no effective treatment for radiation sickness.

Twenty-two other members of Garcia and Jasso's two families received Likely Mountain radiation exposure. All now suffer serious and expensive illnesses, including tumors, blood abnormalities, stomach problems, lung damage, bone pain, muscle spasms, extreme fatigue, tremors, numbness, impaired motor skills, cataracts, memory loss, spine degeneration, sleep problems, low immunity to infection, hearing and vision problems, hair loss and allergies.

Jasso's husband, who often stayed at the lookout, has a rare soft tissue sarcoma known to be radiation related. Garcia's husband, who spent little time at the lookout, has systemic cancer that started with sarcoma of the colon. Garcia's daughter Teresa was at the lookout for a total of two hours during her first pregnancy. Her daughter was born with slight brain damage and immunity problems. "That baby was always sick," says Garcia. Teresa spent only three days at the lookout during her second pregnancy. Her son was born with autism.

Garcia and Jasso have a terminal condition known as "toxic encephalopathy," involving brain damage to frontal and temporal lobes. This was confirmed by SPECT brain scans. Twelve others in the two-family group who also had the scans were diagnosed with the affliction. "All of us with this condition have been told that we,re dying," says Garcia. "Our mutated cells will reproduce new mutated cells until the body finally shuts down."

Nuclear bombs on a pole

Painful conditions endured by the families of Garcia and Jasso are identical to those suffered by Japanese victims of gamma wave radiation after nuclear explosions at Hiroshima and Nagasaki in 1945. Five decades of studies confirm that non-ionizing communications radiation in the RF/microwave spectrum has the same effect on human health as ionizing gamma wave radiation from nuclear reactions. Leading German radiation expert Dr. Heyo Eckel, an official of the German Medical Association, states, "The injuries that result from radioactive radiation are identical with the effects of electromagnetic radiation. The damages are so similar that they are hard to differentiate."1

Understanding what happened at Likely Mountain is critical to understanding the public health threat posed by RF/microwave radiation in the United States. The families of Garcia and Jasso, plus previous lookout workers and multitudes of tourists who visited Likely Mountain for camping and sightseeing, were beamed by the same kind of high frequency radiation that blasts from tens of thousands of neighborhood cell towers and rooftop

antennas erected across America for wireless communications. The city of San Francisco, with an area of only seven square miles, has over 2,500 licensed cell phone antennas positioned at 530 locations throughout the city. In practical terms, this city, like thousands of others, is being wave-nuked 24 hours a day.

The identical damage resulting from both radioactive gamma waves and high frequency microwaves involves a pathological condition in which the nuclei of irradiated human cells splinter into fragments called micronuclei. Micronuclei are a definitive pre-cursor of cancer. During the 1986 nuclear reactor disaster at Chernobyl in Russia, the ionizing radiation released was equivalent to 400 atomic bombs, with an estimated ultimate human toll of 10,000 deaths. Exposed Russians quickly developed blood cell micronuclei, leaving them at high risk for cancer.

What they wouldn't tell us

RF/microwaves from cell phones and cell tower transmitters also cause micronuclei damage in blood cells. This was reported a decade ago by Drs. Henry Lai and Narendrah Singh, biomedical researchers at the University of Washington in Seattle. Dr. Singh is famous for refining comet assay techniques used to identify DNA damage. Lai and Singh demonstrated in numerous animal studies that mobile phone radiation quickly causes DNA single and double strand breaks at levels well below the current federal "safe" exposure standards.2

The telecommunications industry knows this thanks to its own six-year, wireless technology research (WTR) study program mandated by Congress and completed in 1999. Gathering a team of over 200 doctors, scientists and experts in the field, WTR research showed that human blood exposed to cell phone radiation had a 300-percent increase in genetic damage in the form of micronuclei.3 Dr. George Carlo, a public health expert who coordinated the WTR studies, confirms that exposure to communications radiation from wireless technology is "potentially the biggest health insult" this nation has ever seen. Dr. Carlo believes RF/microwave radiation is a greater threat than cigarette smoking and asbestos.

In 2000, European communications giant T-Mobile commissioned the German ECOLOG Institute to review all available scientific evidence in regard to health risks for wireless telecommunications. ECOLOG found over 220 peer-reviewed, published papers documenting the cancer-initiating and cancer-promoting effects of the high frequency radiation employed by wireless technology.4 Many corroborating studies have been published since.

By 2004, 12 research groups from seven European countries cooperating in the REFLEX study project confirmed that microwaves from wireless communications devices cause significant single and double strand DNA breaks in both human and animal cells under laboratory conditions.5 In 2005, a Chinese medical study confirmed statistically significant DNA damage from pulsed microwaves at cell phone levels.6 That same year, University of Chicago researchers described how pulsed communications microwaves alter gene expression in human cells at non-thermal exposure levels.7

Because gamma waves and RF/microwave radiation are identically carcinogenic and genotoxic to the cellular roots of life, the safe dose of either kind of radiation is zero. No study has proven that any level of exposure from cell-damaging radiation is safe for humans. Dr. Carlo confirms that cell damage is not dose dependant because any exposure level, no matter how small, can trigger damage response by cell mechanisms.8

Officials at the U.S. Food and Drug Administration and the National Institutes of Health closely reviewed the damning results of WTR studies, which also revealed microwave damage to the blood brain barrier. But these officials have chosen to downplay, obfuscate and even deny the irrepressible science of the day. Raking in $billions from selling spectrum licenses, the feds have allowed the telecom industry to unleash demonstrably dangerous technology which induces millions of people to become brain-intimate with improperly tested wireless devices9 and which saturates the nation with carcinogenic waves to service those devices. Dr. Carlo says that even the American Cancer Society is in bed with the communications industry, which infuses the Society with substantial contributions.10

Two ways to die

Medical science illustrates that there are two ways to die from radiation poisoning: Fast burn and slow burn. Nuclear flash-burned Japanese had parts of their flesh melt off before they died in agony within hours or days. People have also quickly died after walking through powerful radar beams, which can microwave-cook internal organs within seconds of exposure.

Slow-burn radiation mechanisms are cumulative, progressive, ongoing and continual. Thousands of Japanese nuke bomb victims died painfully years after exposure. The slow burn process of RF/microwave exposure is manifested by cancer clusters commonly found in communities irradiated by cell tower transmitters. Recent Swedish epidemiological studies confirm that, after 2,000 hours of cellular phone exposure, or a latency period of about 10 years, brain cancer risk rises by 240 percent.11

Communications antennas now blast the human habitat with many different electromagnetic frequencies simultaneously. Human DNA hears this energetic cacophony loud and clear, reacting like the human ear would to high volume country music, R&B plus rock and roll screaming from the same speaker. Irradiated cells struggle to protect themselves against this destructive dissonance by hardening their membranes. They cease to receive nourishment, stop releasing toxins, die prematurely and spill micronuclei fragments into a sort of “tumor bank account.” This is precisely how microwave radiation prematurely ages living tissues.

Nuking the crew

The constant roaming pain is intense for 32-year-old Kenneth Hurtado of Southern California. He’s been to hell and back, starting with a seven-pound tumor on a kidney, diagnosed in 2002. The cancer spread to his brain. His first brain tumor was removed by craniotomy, the second by the cyber knife. In 2005, cancer nodes were found in his lungs. By 2006, the cancer had metastasized to his legs. This year he is battling three excruciating tumors on his spinal cord. Hurtado hates his seizures. His last one came on while he was driving. “It’s like the devil taking over your body,” he says.

Now unable to work, Hurtado says he was relatively healthy in 1998 when he began a career as an installer for a large international corporation manufacturing electronics equipment for wireless providers. At the base of cell towers there is an equipment “hut” where installers assemble the radios, amplifiers and filters which generate man-made microwave frequencies and route them up to transmitter antennas through huge cables. Mounted on sector supports aptly named alpha, beta and gamma, the antennas send and receive these carcinogenic radio waves and their pulsed data packets at the speed of light.

Posted on locked fences around the huts are “danger” warning signs. Hurtado says, “You look around these sites and you find many dead birds on the gravel. They can’t take the radiation and they,ll just die. You don’t have to ponder that too long to figure it’s bad.”

Hurtado doesn’t know how much radiation he got on the job. He says there are at least four connection spots inside the hut where radiation can leak. He could not avoid the “heat” when he turned the radios on for testing and he wonders if his cancer is the result. “When I first got hired, we had safety meetings, but they pretty much minimized the hazards,” he remembers. He was issued no electromagnetic safety clothing and it was not until 2002 that he got a radiation meter to wear. “The meter is supposed to warn you if you are getting too much radiation,” he says, “but I put mine on a stick and placed it next to antennas and the alarm never went off.”

A medical report in the International Journal of Occupational and Environmental Health confirms that workers exposed to high levels of RF/microwave radiation routinely have astronomical cancer rates.12 The report notes that, for these workers, the latency period between high radiation exposure and illness is short compared to less exposed populations.

Hurtado says there are many industry workers who are dangerously over-exposed. “I’ve talked to guys on power crews who have to climb around the antennas and they,ve told me that before a work day is half over, they start feeling really sick.” He adds, “In my mind they are getting cooked.”

Hurtado suspects that, since the early days of the wireless buildout, there has been illegal activity related to public exposure from transmission sites. “I’m pretty sure,” he says, “that some of the carriers are exceeding FCC exposure limits. They can turn the radios and amplifiers up to get a bigger footprint and they don’t care if the alarms go on once the installers are gone.” Regulatory inspectors could identify violators because channels can be spectrum analyzed. “But,” he says, “there is just no one to check and I believe that the public is getting way too much radiation now.”

Regulators asleep at the wheel

The Federal Communications Commission (FCC), the single agency with authority to regulate the broadcast/communications industry, has neither money, manpower nor motive to properly monitor radiation output from hundreds of thousands of commercial wireless installations spewing carcinogenic waves across the nation. The FCC admits that physical testing to verify compliance with emissions guidelines is relatively rare.

Critics say that FCC appointees, with virtually no medical or public health expertise, represent an old-boy network and a cheering squad for the telecommunications and broadcast industries. The Center for Public Integrity found that FCC officials have been bribed by the industries with such perks as expensive trips to Las Vegas.13

Dr. Carlo confirms that there is no regulatory accountability. He says, “You have to go to those base stations and independently measure what is coming out of them because we have had many instances where you have an antenna that is allowed by law to transmit at 100 watts and we have seen up to 900 to 1000 watts. You can turn things up when nobody is looking.”14

Neighborhood groups monitoring the broadcast/communications antenna farm on Lookout

Mountain near Denver, Colorado, have consistently found that, despite protests to the FCC over nine years, radiation on the mountain has been measured at up to 125 percent of exposure levels permitted by federal law.15

Lethal exposure guidelines

Even if there were reliable compliance monitoring, many experts say that FCC public exposure guidelines for RF/microwave radiation are deadly because they are based on the obsolete and unfounded theory that only power density hot enough to flash-cook tissues is harmful. This puts FCC at odds with current scientific knowledge regarding the minimum exposure level at which harm to living cells begins.

Myriad symptoms of radiation poisoning can be induced at exposure levels hundreds, even thousands of times lower than current standards permit. Russia's public exposure standards are 100 times more stringent than ours because Russian scientists have consistently shown that, at U.S. exposure levels, humans develop pathological changes in heart, kidney, liver and brain tissues, plus cancers of all types.16

Norbert Hankin, chief of the EPA's Radiation Protection Division, has stated that the FCC's exposure guidelines are protective only against effects arising from a thermal (flash burn) mechanism. He concedes that, "the generalization by many, that these guidelines protect human beings from harm by any and all mechanisms, is not justified."17

Thus, public microwave exposure levels tolerated by the FCC and its industry-loaded advisory committees are a national health disaster. Yet, for pragmatic and lucrative reasons, federal exposure limits have been deliberately set so high that no matter how much additional wireless radiation is added to the national burden, it will always be "within standards."

The FCC regulatory mess comes into focus with the Likely Mountain case. Jasso says that when she and Garcia contacted the FCC regarding their radiation injuries, they were met with an appalling lack of expertise and concern. "FCC has no answers," Jasso says. "Their exposure guidelines are convoluted and nonsensical. They refuse to address problems of multiple antennas, field expansion, human body coupling and blood reversal because they want to avoid regulatory problems at telecommunication sites." She adds, "FCC will fine a licensee thousands of dollars for not having a light installed on top of a telecommunications tower, but they have not issued even a warning letter to their licensees for the injuries that occurred on Likely Mountain. They say injury cannot occur because their licensees are regulated."

Catch 22

When Garcia and Jasso filed suit against companies operating microwave transmitters on Likely Mountain, they could find no attorney who would take their case and they were forced to proceed pro se. In August, 2007, a California district court denied their claim, mainly on the grounds that they had not proven that the defendants had exceeded FCC exposure guidelines. Under federal law the shattered health of 24 people, plus medical testimony, is not sufficient proof of negligence and liability.

Since FCC provides no enforcement monitoring at transmitter sites and since the radiation industry is not required to prove with consistent documentation that it is compliant, injured

parties have little chance of proving non-compliance because the damage to their health often becomes obvious months or even years after their exposure.

The court worried that the Garcia-Jasso case highlights “the conflict between the FCC’s delegated authority to establish RF radiation guidelines and limits and plaintiffs, attempt to establish that wireless facilities like the one at Likely Mountain are ultrahazardous.”So, while current science provides ample evidence that FCC’s guidelines are ultrahazardous, the radiation industry hides behind FCC incompetence, simply because FCC retains exclusive authority to set the standards.

The FCC’s disastrous authority is calcified by the Telecommunications Act (TCA) of 1996. The telecom industry is infamous for lavish “donations” which keep legislators on its leash. Anticipating a national radiation health crisis and the public backlash that would follow, the telecom lobby blatantly bought itself a provision in the law that prohibits state and local governments from considering environmental (health) effects when siting personal wireless service facilities so long as “…such facilities comply with the FCC’s regulations concerning such emissions.” Many say the TCA insures that America’s war on cancer will never be won, while protecting gross polluters from liability.

On our own

After passage of the TCA, a group of scientists and engineers, backed by the Communications Workers of America, filed suit in federal court. They hoped the Supreme Court would review both the FCC’s outdated exposure guidelines and the legality of a federal law that severely impedes state and local authority in the siting of hazardous transmitters. In 2001, the Supreme Court refused to hear the case. The group’s subsequent petition to the FCC asking the agency to bring its exposure guidelines current with the latest scientific data was denied.18

This is where we stand today. The public has no vote, no voice, no choice. Chronic exposure to scientifically indefensible levels of DNA-ravaging radiation is now compulsory for everyone in America. This is why Garcia and Jasso are ill today; this why the industry enjoys unchallenged power to place dangerous transmitters in residential and commercial areas with unsafe setbacks and this is why untold thousands of Americans in buildings with transmitters on the roof are given no safety warnings, though they work and dwell in carcinogenic electromagnetic fields. In the meantime, the radiation industry rakes in $billions in quarterly profits, none of which is set aside for to pay for the national health catastrophe at hand.

Every citizen is now condemned to protect and defend himself against radiation assault as best he can. There have been a number of lawsuits against the radiation industry since cell towers began going up in backyards across the nation. In 2001, a group action lawsuit was filed in South Bend, Indiana, by families living in close proximity to towers. The complaint describes health effects suffered by the plaintiffs, including heart palpitations, interference with hearing, recurring headaches, short term memory loss, sleep disturbances, multiple tumors, glandular problems, chronic fatigue, allergies, weakened immune system, miscarriage and inability to learn.19

The South Bend suit was settled out of court on the basis of nuisance and decreased property values. Health claims don’t hold water if emissions are within FCC exposure standards. This case is valuable for understanding the lunacy of FCC standards. The sick

families enlisted the help of radiation consultant Bill Curry, who honed his expertise as an engineer for Argonne and Livermore labs. Dr. Curry found that one of the towers was irradiating homes at over 65 microwatts per square centimeter.20 This power density is well within federal exposure standards, which allow any neighborhood to be zapped with at least 580 microwatts per square centimeter, or higher, depending on the frequencies. If the families were sick at 65 microwatts/cm2 what would they be at 580? Considering that the Soviets used furtive Cold War microwave bombardment to make US embassy personal radiation-sick at an average exposure level of only .01 microwatts/cm2, America's clear and present danger is obvious.21

How radiation sick is America?

Since the wireless revolution began wave-nuking the U.S. in the 1990s, there have been no federally funded health studies to assess the cumulative effects of ever-increasing communications radiation on public health. There is no national database enabling citizens to study the location of transmitters in their areas. Local and state governments can offer no information on how much commercial wireless radiation is contaminating their populations. When trying to find out who owns a tower or which companies have transmitters on that tower, citizens usually hit a brick wall.

Dr. Carlo heads the only independent, post-market health surveillance registry in the nation where people can report radiation illness. 22 Dr. Carlo says the registry has heard from thousands of people who believe that their illnesses, including brain and eye cancers, are due to telecommunications radiation from both wireless phones and tower transmitters. In the last two years, the registry has seen an upsurge in reports as transmitters become ever more energetically dangerous in order to accommodate increased data flow for new, multi-media technologies.

We can only guess how many Americans are in their graves today from microwave assault. Arthur Firstenberg, who founded the Cellular Phone Task Force, wrote that, on November 14, 1996, New York City's first digital cellular provider activated thousands of PCS antennae newly erected on the rooftops of apartment buildings. Health authorities reported that a severe and lingering flu hit the city that same week. In response to its classified newspaper ad advising that radiation sickness is similar to flu, the Task Force heard back from hundreds of people who reported sudden onset symptoms synchronous to microwave startup"symptoms similar to stroke, heart attack and nervous breakdown.

Firstenberg then gathered statistics from the U.S. Centers for Disease Control and analyzed weekly mortality statistics published for 122 U.S. cities. Each of dozens of cities recorded a 10-25 percent increase in mortality, lasting two to three months, beginning in the week during which that city's first digital cell phone network began commercial service. Cities with no cellular system start up in the same time period showed no abnormal increases in mortality. 23

Studies abroad

Recent health surveys in other nations confirm that people living close to wireless transmitters are in big trouble:

In 2002, French medical specialists found that people living close to cell towers suffered extreme sleep disruption, chronic fatigue, nausea, skin problems, irritability, brain

disturbances and cardiovascular problems.24

German researchers found that people living within 1,200 feet of a transmitter site in the German city of Naila had a high rate of cancer and developed their tumors on average eight years earlier than the national average. Breast cancer topped the list.25

Spanish researchers found that people living within 1,000 feet of cellular antennas had statistically significant illness at an average power density of 0.11 to 0.19 microwatts /cm2, which is thousands of times less than allowed by international exposure standards.26

An Egyptian medical study found that people living near mobile phone base stations were at high risk for developing nerve and psychiatric problems, plus debilitating changes in neurobehavioral function. Exposed persons had significantly lower performance on tests for attention, short term auditory memory and problem solving.27

Researchers in Israel studied people in the town of Netanya who had lived near a cell tower for 3-7 years. They had a cancer rate four times higher than the control population. Breast cancer was most prevalent. 28

Europe in an uproar

A new European Union poll of more than 27,000 people across the continent reveals that 76 percent of respondents feel that they are being made ill by wireless transmitters.29 Seventy-one percent in the UK believe they suffer health effects from mast (cell tower) radiation. In April 2007, The London Times reported a startling number of cancer clusters in mast neighborhoods. One study in Warwickshire, found 31 cancers around a single street. 30 Some sick Brits send their blood to a lab in Germany, which uses state of the art methodology to confirm wireless radiation damage.

Radiation sickness is now so prevalent in Germany that 175 doctors have signed the Bramberger Appeal, a document calling the situation a “medical disaster.” It asks the German government to initiate a national public health investigation. This appeal closely follows the Freiburger Appeal, signed by thousands of German doctors who say they are dealing with an epidemic of severe and chronic diseases among both old and young patients exposed to wireless microwave radiation. The head of the cancer registry in Berlin found that one urban area with cellular antennas had a breast cancer rate seven times the national average.31

Sweden was one of the first nations to go wireless. Swedish neuroscientist, Dr. Olle Johansson, with hundreds of published papers to his credit, says that a national epidemic of illness and disability was unleashed by the wireless revolution. Long periods of sick leave, attempted suicides and industrial accidents all increased simultaneously with introduction of mobile phone radiation. Ninety-nine percent of the Swedish population is now under duress of powerful third generation masts. Johansson reports that people are plagued with sleep disorders, chronic fatigue that does not respond to rest, difficulties with cognitive function and serious blood problems. Recurrent headaches and migraines are a “substantial public health problem,” he says.32

Rooftop transmitters, which readily pass microwave radiation into structures, can be a death sentence. Across the world there are reports of cancer clusters and extreme illness in office buildings and multi-tenant dwellings where antennas are placed on rooftops directly over

workers and tenants. In 2006, the top floors of a Melbourne University office building were closed after a brain tumor cluster drew media attention to the risks of communications transmitters on top of the building.33 Likewise, ABC's Brisbane television complex, topped with satellite dishes and radio antennas, was the site of a well-publicized breast cancer cluster among workers.34

Deadlier death rays

In the meantime, the radiation cowboys of America are having a good ol time because they know there's no sheriff in town. The commercial wireless industry is relentless in its drive to construct thousands of new transmitter sites in neighborhoods and schoolyards everywhere, while adding more powerful antennas at its older sites. Countless WiFi systems, both indoors and out, accommodate wireless laptop computers, personal digital assistants, WiFi-enabled phones, gaming devices, video cameras, even parking and utility meters. Hundreds of cities already have or are planning to fund WiFi networks, each consisting of thousands of small microwave transmitters bolted to buildings, street lamps, park benches and bus stops. Some networks are being buried under sidewalks. These access points or "nodes" blast carcinogenic energy at 2.4 to 5 gigahertz with virtually no warning signs about radiation exposure. WiFi radiation is unregulated by the FCC.

Sprint-Nextel and Clearwire are now rolling out in U.S. cities tower-mounted WiMAX transmitters providing wireless internet access "to die for." WiMAX is WiFi on steroids. Upon startup of WiMAX transmitters near the Swedish village of Gotene, the emergency room at the local hospital was flooded by calls from people overcome with pulmonary and cardiovascular symptoms.35

WiMAX radiation could one day be cranked up to a bone-incinerating 66 gigahertz.36 A single WiMAX tower could provide internet coverage for an area of 3,000 square miles, although coverage for 6-25 square miles is the norm now. Promoters say WiMAX may some day replace all cable and DSL broadband services and irradiate virtually all rural areas. Yet, not a single environmental or public health study has been required as the industry unleashes infrastructure for this savage new wireless technology from which no living flesh will escape.

The commercial ray-peddlers are not alone in their quest to make the U.S. a radiation wasteland. In August, 2007, Congress approved new Homeland Security legislation which funds a program to "promote communications compatibility between local, state and federal officials." We catch a glimpse of what this portends as the state of New York gears up to erect hundreds of new wireless installations for a "Statewide Wireless Network (SWN)." This system will blanket 97 percent of the state, allowing agencies at various government levels to communicate instantly while greatly adding to the fog of commercial wireless pollution.37 The New York Office for Technology says that the radiation power densities of the system will be within FCC limits. That assurance should give us the shivers.

Angela's story

Angela Flynn, a 43-year-old caregiver, lives in Santa Cruz, California. Last spring she took classes at a local church where wireless antennas were concealed in a chimney on the building. She recalls, "Every muscle in my body felt sore. And my joints were feeling creaky. My instructor mentioned how people at the women's center on church property had similar symptoms. During my sixth day I had a severe reaction. My short term memory was gone

and I was disoriented and confused. When the instructor asked a question, I could not recall anything from the lecture."

At night, Angela could not sleep and she would lie awake, feeling her body buzz. She became hypersensitive to other sources of electromagnetic radiation. The symptoms became so bothersome that she canceled the rest of her course. Using a chart for calculating cumulative, non-ionizing, electromagnetic radiation exposure levels, she found that the classes "located only 100 feet from antennas in the building" had suffered the highest possible exposure during peak operation. "It took a month before I regained my health," she reports.

When Angela wrote letters to the church inquiring whether it was monitoring the health of the people exposed to antenna radiation, church officials were "unresponsive and dismissive." So Angela saw the light. She helped organize a community group to put pressure on county officials for answers. After hearing community testimony, officials directed the zoning department to create a comprehensive map of county transmitter sites and to put together a report on emissions testing.

Angela says, "We recently had a delay of an installation of a tower near a middle school. The superintendent has even come out against the tower and was instrumental in delaying the hearing on the site. He also arranged a school board meeting on the issue." Angela's efforts to share critical information with her community made a difference.

Conclusion

America must soon face its radiation cataclysm. The EMR Network says that millions of workers occupy worksites on a daily basis where operating antenna arrays are camouflaged and where no RF safety program is carried out. Thanks to shameless predatory advertising techniques, American youth are now literally addicted to "texting," watching TV and accessing the Internet on tiny wireless screens. These are the toys that keep cell towers and WiFi hot spots buzzing. A nation that requires compulsory mass irradiation to fuel its trivial entertainment needs is surely destined to have a sickly and short-lived population.

Right now, 11.7 million Americans have been diagnosed with cancer. Because humans can harbor cancer conditions for years before detection, additional millions of cancer victims are yet undiagnosed. The Journal of Oncology Practice predicts that, by 2020, there will be so many cancer cases in the U.S. that doctors may not be able to cope with their caseloads. The report concludes the nation could soon face a shortage of up to 4,000 cancer specialists.38

A recent CBS news series on the raging American cancer epidemic left viewers with the mindset that trainloads of federal cash must flow if we are to find the cancer answer. But a proven cancer initiator now inundates our cities, roadways, schools, offices and homes. Any environmental stressor that jackhammers human cells at millions to billions of cycles per second is a cancer factor. Any wave-pollution that breaks the DNA and causes pre-cancerous micronuclei in human blood is a cancer factor. Logic tells us that there will be no "answer to cancer" until we eliminate the cancer factors.

Wireless communications radiation is to America today what DDT, thalidomide, dioxin, benzene, Agent Orange and asbestos were yesterday. Historically, the truth about the public health menace of extreme toxins is never told until thousands sicken and die.

Dr. Robert Becker, noted for decades of research on the effects of electromagnetic radiation, has warned: “Even if we survive the chemical and atomic threats to our existence, there is the strong possibility that increasing electropollution could set in motion irreversible changes leading to our extinction before we are even aware of them. All life pulsates in time to the earth and our artificial fields cause abnormal reactions in all organismsThese energies are too dangerous to entrust forever to politicians, military leaders and their lapdog researchers.” 39

Our mission to save the nation’s health and restore sanity in the wireless age seems daunting. The wireless juggernaut is an aggressive, mean machine. Federal regulators are clearly compromised and incompetent to protect the public health. Uninformed consumers dearly love their magic digital toys and don’t yet understand the connection between those toys and a national raging cancer epidemic that may consume us all.

Powerful economic interests have lied to us long enough. Americans deserve the facts. We need dialogue. Wireless radiation is a form of electronic trespass. America must decide whose rights are more important”idlers beaming death rays for piddling gibberish or the elderly with pacemakers who are made ill by cell phone and tower radiation wherever they go. Must we all prematurely perish so that wireless enthusiasts can capture cell phone photos and instantly send them for processing via carcinogen express? Must all neighborhoods become sick zones so that radiation addicts can receive recipes, ads and other frivolous text messages on their cell phone toys? Does a human being have the right to NOT be forcibly WiMAXED into a coffin, or do only wireless providers and their devotees have rights?

What can we do?

We can commit to join the growing radiation awareness movement and continue educating ourselves and others. We can employ digital and audio radiation detectors to help safeguard our personal health and to demonstrate the ceaseless brutality of ubiquitous wireless radiation which threatens the genetic integrity of future generations. We can promote emerging technologies that could make communications technologies safer.

We can demand that federal radiation exposure standards and setback requirements be updated to reflect the realities of modern science. Federal communications law must be rewritten so that local jurisdictions can regain their right to consider health and environment when reviewing wireless siting applications. We can insist that wireless emissions from transmitters be drastically reduced as they are in Austria and Russia. We can demand routine compliance testing at all transmitter sites. We can see to it that people who have been living and working near powerful transmitters be given opportunity to report their resulting illnesses in national surveys. Proper epidemiological studies must be conducted and their results published and broadly disseminated.

Each of us can break the seductive, but oppressive wireless habit ourselves. We can play no game, use no wireless Internet system, make no trivial phone call that necessitates enlarging America’s dense forest of wireless transmitters. If no one buys WiMAX-enabled devices and related services, this dangerous system will fail.

Whenever possible, we can go back to the old-fashioned, corded phones and message machines which made yesteryear a far more healthy time. Cordless household and office phones emit powerful megahertz or gigahertz microwave radiation, causing damage to

hearing, eyesight and brain function. DECT cordless phones irradiate a huge area even when not in use. We can encourage others to contact us by conventional land line phones only. Can we enjoy a leisurely conversation knowing that an irradiated caller risks disease and disability for mindless chatter? What good is wireless convenience if it means being ultimately tethered to a hospital bed? We can teach our children that health is more important than passing convenience and instant gratification.

According to OSHA, no environment should be deliberately made hazardous. Backed by current scientific knowledge, we can refuse to work or shop in an environment which endangers our health. We can demand that megahertz and gigahertz cordless phones, walkie talkie radios, WLAN and WiFi systems be removed from schools, offices, hospitals and any public place where people are grossly irradiated without their informed consent. Second hand smoke is bad; second hand radiation is worse.

We wish to thank the courageous radiation victims interviewed for this report who have generously revealed the details of their personal suffering in order to warn others. Following their example, we must continue undaunted in the moral quest to protect the national health and restore the world to sanity before it is too late.

Meters and resources

The Electrosmog Detector allows you to HEAR the intensity of RF/microwave pollution in your environment. Developed by British radiation expert Alasdair Phillips, this battery-operated device will quickly allow you to identify dangerous RF/microwave hotspots, even where transmitters are concealed, and take action to protect yourself. This meter is $99 (price includes shipping) and can be obtained from HEARING IS BELIEVING, Box 64 Hayden, Idaho 83835. E-mail: gzz@icehouse.net.

The Trifield Meter ($145), produced by Alpha Lab, is used mainly to measure the milligauss of electromagnetic fields coming from 60 hertz sources. Use this digital meter to make sure your living and working spaces are under 2 milligauss. Alpha Lab’s Microwave Power Density Meter ($320) is a more sensitive digital microwave meter that will help you assess the kilohertz, megahertz and gigahertz radiation in our wireless environment. This easy-read meter measures microwave radiation in microwatts per cm2, allowing comparison of your readings to the power density used by the Russians to make our embassy staff sick. Remember, people inside the embassy reportedly received only about .01 microwatts per cm2. For more information, contact Alpha Lab Inc., 1280 South 300 West, Salt Lake City, Utah 84101; (800) 658-7030; www.trifield.com

Alan Broadband produces radiation detection devices with models ranging in price from $159 to $2,800. The $159 model, while not giving detailed readings, is an extremely sensitive and sturdy instrument that gives an accurate dial read on whether or not radiation is present and its relative intensity. It lets you know when you are being irradiated and serves as an excellent tool to illustrate exposure levels to others. For more information, contact Alan Broadband 93 Arch St., Redwood City, California 94062; (888) 369-9627; www.zapchecker.com

Books

Cell Phones: Invisible Hazards in the Wireless Age, Dr. George Carlo and Martin Schram, Carroll & Graf Publishers, 2001.

Cellular Telephone Russian Roulette, Robert C. Kane, Vantage Press, 2001.

Cell Towers: Wireless Convenience or Environmental Hazard? The Berkshire-Litchfield Environmental Council, Edited by B. Blake Levitt, 2000. Order from Barnes and Noble.

Websites

These websites provide excellent information on all aspects of health and other issues relating to electromagnetic fields and radio frequency/microwave radiation.

www.buergerwelle.com This excellent German (but in English) site features RF/microwave radiation news from all over the world. The science keeps pouring in and this is where to find it, along with lots of human interest.

www.cprnewsbureau.org This is an excellent source of up-to-date news on wireless issues.

www.emrnetwork.org This site has superb resources organized by professionals with expertise in all facets of our RF/microwave radiation problem.

www.safewireless.org This site features Dr. Carlo's Mobil Telephone Health Concerns Registry where people can report ill health effects from living near microwave transmitters or from the use of wireless devices. It also features great news reports.

www.microwavenews.com This is home to Microwave News, an excellent monthly publication. It offers cutting edge science reports, plus a great archive.

www.sageassociates.net This site provides valuable information on how to make homes and offices safer in the wireless age.

CAUTION: There are many devices on the market claiming to protect wireless users from radiation. These include: air tube headsets, ferrite bead clip-ons and an array of paste-ons advertised to cut down on thermal effects or deflect negative energy. Energy testing, kinesiology and meter readings indicate that these mitigation devices DO NOT adequately protect against the brutal force of near field microwave radiation. You can investigate the effectiveness of these devices by metering radiation levels while using them. If radiation pours from your "safe" headset, don't bank your life on it. If practiced in the art of kinesiology, you can also "muscle test" the effectiveness of the radiation mitigation device. The human body becomes very weak when irradiated with any man-made frequency, especially microwaves. If a protective device is really working, you will not detect muscle weakness when the body is near a transmitting wireless phone or gadget.

OUR BEST TIP: If you want a safe household phone, find an AT&T corded speaker phone 950, available at most large office supply stores. It emits no microwave radiation, holds up to heavy use, has a great digital display screen and allows hands-free conversation.

NOTES

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Vienna. Also “DNA Damage and Cell Phone Radiation,” www.rfsafe.com, 11-02-05.

3. Cell Phones: Invisible Hazards in the Wireless Age, Dr. George Carlo and Martin Schram, Carroll & Graf Publishers, 2001, p.151.

4. “Mobile Telecommunications and Health”Summary of the ECOLOG study for T-Mobile, 2000,” Find this summary at www.hese-project.org.

5. “Cell Phone Radiation Harms DNA, Study Claims,” (Reuters) MSNBC, 12-04-04. Also “Mobile Phone Radiation Harms DNA,” R. Moss, CPR News Bureau, 10-16-06.

6. “RF-Induced DNA Breaks Reported in China,” Microwave News, 09-29-05. This report comes from the Zhejiang University School of Medicine.

7. “2.45 GHz radiofrequency fields alter gene expression in cultured human cells,” Lee S. et al, Department of Medicine, University of Chicago, PubMed 16107253.

8. “Health Social Services and Housing Sub-Panel Telephone Mast Review,” a public discussion by Dr. George Carlo, 2-26-07. Find this excellent dissertation at www.safewireless.org.

9. Few Americans know that cell phones have never been safety tested thanks to the FDA, which exempted cell phones from pre-market testing based on a “low power exclusion” rule.

10. “The American Cancer Society is Misleading the Public,” Dr. George Carlo, 8-5-07. Find this statement at www.buergerwelle.com.

11. “Long-Term Mobile Phone Use Raises Brain Tumor Risk: Study,” Reuters, 03-31-06. This research was conducted by the Swedish National Institute for Working Life whose scientists studied 905 people with malignant brain tumors to confirm a 240% increased risk of brain tumors after heavy mobile phone use.

12. “Cancer in Radar Technicians Exposed to RF/Microwave Radiation: Sentinel Episodes,” Richter E. et al, Int. J. Occup Environ Health 6 (3):187-193, 2000.

13. “FCC Lives Large off Lobbyist Bribes,” Capitol Hill Blue, 05-22-03, capitolhillblue.com.

14. “Health Social Services and Housing Sub-Panel Telephone Mast Review,” public discussion by Dr. George Carlo, 2-26-07. Find this excellent dissertation at www.safewireless.org.

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16. For an excellent chart comparing biological effects at power density levels and a list of international exposure standards, go to: “Radio Wave Packet,” Arthur Firstenberg, Cellular Phone Task Force, Sept 2001; also find this power density list at: “Analysis of Health and Environmental Effects of Proposed San Francisco Earthlink WiFi Network, Magda Havas, Ph.D, Trent University, May 2007.

17. Quote from letter by Norbert Hankin, chief environmental scientist with EPA’s Radiation Protection Division. This letter was received by EMR Network 7-16-02 and can be found at

www.emrnetwork.org.

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