

# NEWSLETTER 2013

## Cell Phone/Tower Radiation Hazards and Solutions

# 01

VOLUME 1

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## Editor's Column



“

Cell phone industry may not admit that there are harmful effects just like cigarette industry. People have to unite to convince policy makers to adopt stricter radiation norms to protect people, birds, animals, trees, plants and environment.”

*Professor Girish Kumar*

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Cell phone technology has grown rapidly and currently there are more than 90 crore cell phone subscribers and nearly 5.0 lakh cell phone towers in India. From Sep. 1, 2012, India has adopted 1/10 of ICNIRP Guidelines, which implies safe power density of 470 milliWatt/m<sup>2</sup> for GSM900 and 920 milliWatt/m<sup>2</sup> for GSM1800 based on Inter-Ministerial Committee (IMC) report 2011, which mentioned several health hazards due to radiation.

A large number of scientists prepared Bio-Initiative Report in 2007 and they proposed safe radiation density of 1.0 milliWatt/m<sup>2</sup> for outdoor cumulative RF exposure and 0.1 milliWatt/m<sup>2</sup> for indoor cumulative RF exposure. Again, 29 scientists from 10 countries prepared Bio-Initiative Report in 2012, who scrutinized 1800 papers and reported that health hazards were a certainty.

The most common complaints are: sleep disorder, headache, irritability, concentration problems, memory loss, depression, hearing loss, joint problems, etc. More severe problems include seizures, paralysis, miscarriage, irreversible infertility, and cancer. Children and pregnant women are more vulnerable.

Interphone study in May 2011 reported that excessive users of mobile phones (i.e., 1/2 hour/day over 8 to 10 years) have doubled to quadrupled brain tumor risk. On May 31, 2011, WHO reported, "The electromagnetic fields produced by mobile phones are classified by the International Agency for Research on Cancer as possibly carcinogenic to humans."

An expert group of 10 people formed by Environment Ministry, India submitted their report in Oct. 2011 on "Impacts of communication towers on Wildlife including Birds and Bees". They have referred 919 papers and classified 593 reported adverse effect, 130 papers reported no effect, and 196 papers reported inconclusive/neutral effect. Thus, apart from humans, cell tower radiation also affects birds, animals, plants, and environment. Yield of fruit bearing trees near cell towers is going down significantly.

Many countries have adopted stricter norms, for example, Austria has a radiation norm of 1 milliWatt/m<sup>2</sup>. If mobile coverage is possible in these countries, then there is no reason why we cannot have low radiation norms in our country.

**The cell phone industry and telecom operators may not admit that there are harmful effects just like cigarette industry did, decades ago. People have to unite to convince policy makers to adopt stricter radiation norms to protect people, birds, animals, trees, plants and environment.**

This newsletter is a repository of news and information on radiation, particularly from cell towers. In this first bi-monthly newsletter, you will find news from Mumbai on Pages 2 to 4, news from other states on Pages 5 and 6, international news on Page 7 and lighter moments on Page 8.

## Events

### Workshop at IIT Bombay

Two workshops on "Cell Tower Radiation Hazards and Solutions" have been conducted at IIT Bombay on Nov. 20, 2011 and July 9, 2012. Purpose of the workshop was to bring all the stake holders (concerned citizens, operators, doctors, scientists, etc.) and create awareness. Details of the workshop and several reports and videos are uploaded at: <http://www.ee.iitb.ac.in/~mwave/workshop2>

Prof. Girish Kumar has been giving lectures to create public awareness at several cities, namely, Ahmedabad, Ajmer, Barwani, Bengaluru, Bhopal, Bhubaneswar, Dehradun, Delhi, Goa, Indore, Jaipur, Jodhpur, Kolkata, Mumbai, Nanded, Pondicherry, Pune, Thane, Thiruvananthapuram, Varanasi, etc.



## DoT wakes up to cancer risk from mobile towers

Neeraj Thakur & Karishma Goenka @DNA

**dna** exclusive

**Mumbai:** The department of telecommunication or DoT has finally woken up to the fact that there may be a correlation between cancer and exposure to radiation from cell phone towers. A comprehensive study conducted by a DoT body has documented cases of cancer deaths in areas overexposed to telecom towers in Mumbai.

"TERM Cell Mumbai has been receiving complaints on suspected high radiation from mobile towers. While going through some of these cases, one case has come to notice where in one residential com-



**She survived cancer:** Kirtida Bhatt, 62, (centre), who lives in a building close to a cellphone tower, of Mumbai was diagnosed with cancer. But she survived.

Published in DNA, Mumbai on April 7, 2013

A study conducted by the Department of Telecommunication (DoT) body 'TERM Cell, Mumbai' has documented cases of deaths due to cancer in areas overexposed to radiation from telecom towers in Mumbai. They reported that in one residential complex, six members of five individual families have been diagnosed with cancer in a span of 5-6 years.

A resident of Jawan Nagar society mentioned that at least eight of his neighbours have died due to cancer in his society in the past two years, and the towers are less than 20 metres away. "We are not going to wait for one of us to get cancer and so have decided to take legal action," he said.

Published in Hindustan Times, Mumbai on January 7, 2013

## Radiation affects health: global report

**PROOF** The Bioinitiative 2012 report refutes claims by cellular phone operators that there is no conclusive evidence to prove correlation between radiation and health problems



Reetika Subramanian  
@riskin.subramanian@hindustantimes.com

**MUMBAI:** A global report published on Sunday has turned the tables on cellular phone operators and even the civic body, who have been claiming that there is no "conclusive evidence" to prove the correlation between exposure to mobile tower radiation and health problems.

"Continuous base station-level exposure can result in illness and have biological effects that can interfere with normal body processes, prevent the healing of damaged DNA, produce immune system imbalances, cause metabolic disruption and lower resilience to disease," states the Bioinitiative 2012 report.

### HARM TO HEALTH

**THE AIM OF THE REPORT:** It studies and highlights the possible risks from wireless technologies and electromagnetic fields; around 1,300 global research papers written by scientists and health experts were studied before the 2012 report was released on Sunday.

### WHAT THE REPORT SAYS

Continuous base station-level exposure can result in illness.

Prolonged exposure can interfere with the functioning of the body, prevent it from healing damaged DNA, can produce immune system imbalances, create metabolic disruption and lower resilience to disease.

Headaches, difficulty in concentration and behavioural problems have been found in children and adolescents; and sleep disturbances, headaches and concentration issues in adults.

Existing global public safety limits don't seem to be sufficiently protective of public health, especially when it comes to that of the foetus, newborn and very young children.

Early childhood exposure may increase the risk of developing hyperactivity, learning disorders and behavioural problems.

### WHO'S BEHIND THE REPORT?

The Bioinitiative 2012 report is published by 29 independent scientists and health experts from 10 countries, including India, Sweden, Italy, Greece, Canada, Austria, US and Russia. This is the second edition of the report; the first was published in 2007.

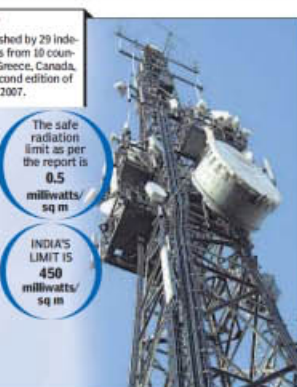
### COMBAT RADIATION EFFECTS

Health agencies and regulatory agencies should go by recent studies and adopt new, biologically relevant safety limits and adhere to the lowest scientific benchmarks for harm. Special safety limits must be put in place for sensitive population, including foetus, infants, children, elderly and those with pre-existing diseases.

Strong precautionary action and clear public health warnings needed immediately to prevent global epidemic of brain tumours.

Steps must be taken to lower rates of premature death.

Follow the scientific benchmark of 0.03 milliwatts/square metre for 'lowest observed effect level'.



### HT's coverage

HT has been consistently reporting on radiation from cellphone towers in the city

Locals measure radiation in Solis, to compile report



We reported on how Malabar Hill residents visited mobile towers in south Mumbai to measure the radiation emitted

NOVEMBER 23, 2012

During our campaign, we also informed our readers how they could help identify illegal mobile towers in their neighbourhood

BMC to upload list of legal cellphone towers

NOVEMBER 16, 2012

We have consistently reported on the

Civic doctors to

Bio-Initiative report of 2012 is brought out by 29 independent scientists and health experts from 10 different countries. They went through 1800 research papers and reported that there are several health

hazards like headache, difficulty in concentration, immune system imbalance, DNA damage at prolonged exposure even when radiation level is as low as 0.03 and 0.5 milliWatt/m<sup>2</sup>.

Published in Middy, Mumbai on Jan 3, 2010

### CASE STUDY

Usha Kiran Building, Carmichael Road, Mumbai



The cell phone towers installed on the Vijay Apartments terrace at Carmichael Road **pic/Bipin Kokate**



Usha Kiran Building

Three cases of brain tumours (two cases of cancerous nature and one case of recurrent/aggressive meningioma) and one case of bone cancer were reported in a span of few months in Usha Kiran building.

One year after the article was published two more cancer cases were reported in the same building. The six cancer cases were detected in consecutive floors (5th, 6th, 7th, 8th and 10th) that are directly facing and at the same height as the two mobile phone towers placed on the roof of the opposite building.



## An Aawhan against cellphone tower radiation

■ JASVEER SINGH, NEHA INNANJE, SURYA KAZIPETA, TANMAY SHRIVASTAVA

To ensure better connectivity several network operators have set-up their radiation towers within the institute. Currently, one can find these towers at Tansa House, Hostel 14, Main Building and the Chemical Department. Although students complain of poor network coverage there's a flipside to this opinion, which a certain PAF tried to showcase last year. It has been alleged by several researchers, including some faculty at IIT Bombay, that the high intensity radiation emitted from network towers might be severely damaging to humans. Through the course of this article we unearth the major differences between the safety norms of India from other countries and also how safe are you at IITB specifically. As part of our research we mapped the radiation intensity at several places in the campus, the results of which can be seen in the map below.

### What happens on a Radiation Tower?

Considering each tower houses several network operators, the usual power emitted from an

individual tower is in the range of 300 Watts. In the United States, the law stipulates that cellular companies keep their power levels strictly under control. In contrast, in India, the factor of safety is forgone. Thus, it leaves the possibility for disastrous biological effects, due to long term exposure to low level radiation even if there are little or no short-term symptoms. Besides this, the cell towers in India are much shorter than their counterparts in the United States, thus increasing the chances of plausible damage due to decreased distance from the primary source.

**India allows a radiation density upto 4500 mW/m<sup>2</sup> while Switzerland decrees that the radiation levels in its schools, apartments and hospital areas cannot exceed 42 mW/m<sup>2</sup>.**

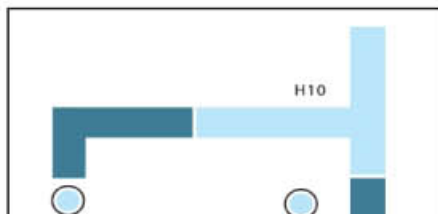
### How is the situation at IIT Bombay?

The accompanying map depicts the readings taken by *InsighT* using an indigenous machine developed by Prof. Girish Kumar, Electrical Engineering Dept., IITB. The part of the map in light cyan shows the areas where radiation levels are within safe limits

are well within the limits enforced by the law.

But the norms laid down by our Government are themselves extremely lax allowing for a radiation density of 4500 mW/m<sup>2</sup> while the Bio-initiative report demands this number to be as low as 1 mW/m<sup>2</sup> for outdoor areas (limited exposure) and 0.1 mW/m<sup>2</sup> for indoor areas (continuous exposure). Switzerland for example, decrees that the radiation levels in its schools, apartments, hospital areas, etc. cannot exceed 42 mW/m<sup>2</sup>. Prof. Kumar's efforts over the last couple of years have resulted in the Govt. of India reducing the acceptable limit to 450 mW/m<sup>2</sup> which, while a large improvement over the previous standard, is still far from ideal.

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IIT Bombay students took an initiative to map the radiation intensity at several places in the campus and they found that radiation is at hazardous levels in several areas in the

campus. The Bio-sciences department professors have sent a letter to the institute authorities to set up low-power network towers to ensure safe environment.

Published in DNA, Mumbai on April 22, 2013

## 'Cancerous' cell phone towers panic Parsi Colony

6 cancer cases in 3 yrs, residents call meet to devise strategy

Ashutosh Shukla @scribeshutosh

Freny Kavarana, a resident of Shree Samarth building in Dadar's Parsi Colony, says that she feels "horrible" when sitting in her room. Operated for a cancerous tumour in her stomach last year, Kavarana and three other people in her building blame cell phone tower radiation for the disease.

Despite minister of state for communications and information and technology, Milind Deora, stating that there is no proof that radiation from cell phone towers is hazardous to health, citizens continue to be apprehensive.

After six cases of cancer were reported in the past three years in the neighbourhood, the residents of the Parsi Colony are a panicked lot. They have put up banners and distributed handbills in the area, inviting people for a meeting on April 28, protesting against the cell phone towers on buildings in



A resident of Dadar's Parsi colony points at a cell phone tower atop a building in the area on Sunday — Rajendra Gawkar/dna

the vicinity.

Kavarana, who is still undergoing treatment post her surgery last year, says, "I can't prove it, but people like me — who have suffered from cancer — have a strong suspicion that it is due to the cell phone towers that came up around here a few years ago." Aditya Gandhi, whose mother

was detected with ovarian cancer in 2010, says, "Our window opens up to cell phone towers which are less than 35 metres away, on the third floor terrace of the adjoining building."

Some residents have spent large amounts of money putting up radiation films to obstruct the radiation emitted from these

towers. Awa Jassawalla, who lives in Boman Lodge on Dr Ambedkar Road, spent over Rs1.5 lakh to put up such films two months ago. "I am unable to enjoy the view from my penthouse apartment, only because of the towers that are just 15 metres away," she says.

s.ashutosh@dnaindia.net

After six cases of cancer were reported in the past three years in the neighbourhood, the residents of Parsi Colony are a panicked lot. They have put up banners, distributed handbills in the area and invited people for meetings to protest against the cell phone towers on buildings in the vicinity.

A resident who is undergoing treatment post her surgery, says, "I can't prove it, but people like me — who have suffered from cancer — have a strong suspicion that it is due to the cell phone towers that came up around here a few years ago."



Published by the Times of India on May 13, 2013

## Doctors report 50% hearing loss among cellphone users

Pratibha Masand | TNN

**Mumbai:** Excessive use of cell-phones can cause the deadliest of health hazards among users, from hearing loss to neuro-endocrine disruption, hormonal imbalance and cancer.

Over the last decade, cellular phone usage has grown exponentially with the introduction of new communication systems and newer and smaller



CANCER CALL

Prolonged cellphone radiation is said to cause cancer. In a study published in the Journal of the Association of Physicians of India in 2008, endocrinologist Dr Shashank Joshi, along with other doctors, had shown how electromagnetic rays from a cellphone cause neuro-endocrine disruption. "Apart from cancer caused by radiation, the cell phone culture increases sedentary work

Doctors say that excessive use of cell phones can cause the deadliest of health hazards among users like pain in the ear, hearing loss, tinnitus (where there is a buzzing in the ears) to hormonal imbalance and ultimately cancer. Hormones like endocrine and melatonin are disrupted big time by excessive cell phone usage. This tends to increase stress and also reduces sleep time in a person's daily biological cycle.

"It is good, therefore, to decrease talking over the mobile phone, and use landline or texting", say Dr. Shashank Joshi, Member of the Association of Physicians of India.

Published by Hindustan Times on October 12, 2012

Four final year Information Technology students of Xavier's Institute of Technology, Mahim, have taken up the task of creating awareness on the implication of cell tower radiation. From forums on social networking sites and blogs, to college festivals and seminars, the students want to build pressure on the union government to take cognizance of the high levels of radiation suspected from cell towers.

## Students take up fight against radiation

Reetika Subramanian

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**MUMBAI:** Four final year information technology students of Xavier's Institute of Technology, Mahim, have taken up the task of creating awareness about the implications of mobile tower radiation emission among city's college students.

From forums on social networking sites and blogs, to college festivals and seminars, the students want to build pressure on the union government to take cognizance of the hazards of suspected high levels of radiation emitted by mobile towers.

Kanika Jain, 21, along with her classmates Sasha Sequeira, 21,

### WHY YOU SHOULD CARE

People living close to mobile phone towers are at the risk of health disorders such as sleep disturbances, headaches, fatigue, joint pains, memory loss etc. Prolonged exposure increases the risk of neurological disorders and cancer.

The city has 12 cellular operators and 18,000 cell towers. DoT officials say every operator needs at least 2,000 towers for sufficient network coverage in the city.

Civic data shows that of the 3,705 mobile towers in the city, 1,830 are illegal.



(From left) Jaysel Meledath, Fr John Rose, Sasha Sequeira, Nileema Lobo and Kanika Jain check the radiation at Mahim.

### THE RADIATION ZONE - RED, YELLOW 'N GREEN

Suspect high radiation levels in your area? Act Now. Contact the public helpline (99695 55000) or log on to the

Department of Telecommunication (DoT) website [www.dot.gov.in](http://www.dot.gov.in) and click on the 'Public Grievance- EMF Radiation' link.

In 2012, five people at a school in Mumbai for the visually challenged were diagnosed with cancer. None of them had any family history of cancer. Regrettably, the school caretaker succumbed to cancer in 2011. School authorities have attributed the 10 towers around the school for this.

"The school is more than 40 years old but it is only now that there are cancer cases, after the towers were installed a decade ago," said director Meher Banaji.

"Continuous prolonged exposure is dangerous. Effects could range from genetic damage to malignancy," said Dr Ashish Mehta, neurosurgeon, Breach Candy Hospital, Mumbai.

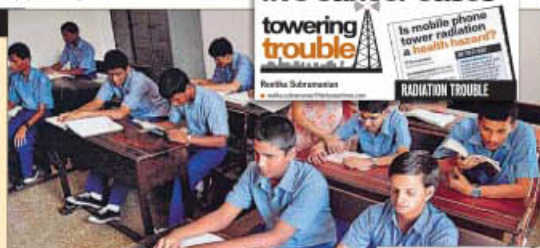
Hindustan Times Mumbai, on Nov 24, 2012

Experts say what is happening at the school shows

### THE STORY SO FAR

**ON SEPTEMBER 1,** the union department of Telecommunication (DoT) revised the permissible limit for electromagnetic frequency radiation from mobile towers to 450 milliwatts/square metre from 4,500 milliwatts. However, anti-radiation campaigners claimed that the limit was too high.

**ON OCTOBER 4,** the DoT launched the complaint-handling system in the city on a pilot-basis. Citizens can register their complaints on the DoT helpline or website for a processing charge of Rs4,000. The money would be reimbursed if the reported tower violates the prescribed norm, and the tower operator would be charged Rs5 lakh fine. So far, no violation has been detected.



Student at the Happy Home and School for the Blind in Worli.

**ON NOVEMBER 7,** civic chief Sitaram Kurte conducted a review meeting to propose revised norms for the civic body's policy on mobile tower installations. The norms were revised on the basis of the guidelines proposed by the DoT.

**ON NOVEMBER 9,** the civic body in its general body meeting decided to appoint a special legal counsel to appeal to the high court to vacate the existing stay order, which prevented it from taking action on the 1,800 illegal mobile towers

## City school blames mobile towers for five cancer cases

towering trouble  
Is mobile phone tower radiation a health hazard?



There are 10 mobile towers in school's vicinity. SHAKTI WAD



Kanpur (UP)

2 Invest, Maastricht, 21 February 2013.

## 40 परिवारों की जान का दुश्मन बना

▶ तबकाकाज से  
जोबाइल टोंक  
दे हस छिया के  
सोनें यो  
पाक  
बीज-रिज

टॉपर के डर से  
आपने ही घर में  
डर और दहशत  
ले बिठाई  
पादने की  
सजकूती

हय कैमिली  
लेमबर किसी न  
चिली बीजली से  
पिंडी, सर चरी  
छतों पर जल  
छेड़

ये बीजकटिना सुई  
इन दृष्टान्त, मित्र  
किया, जो वे

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अब तक ११ जीके...।

[illegible]

संयुक्त टीयर के अलावा हमें काले प्रकाश लेने की निरवधि  
सफाया प्राप्त, गर्म कीमती केमिस्ट्री है।

### आई जेवस्ट टीज का एक्सपीरियंस

महाकाव्य के इस वहील पर ऊर्ध्व नेमरा की टिमि कविता बंद हो गई थी, आग का सारा जीव इस से मिटने पर और कहीं-कहीं का भी फिर से जीवित होना, जो से मिलना-जुलना हीने का महाकाव्य होने के साथ-साथ ही उसे पुनः जलन का अनुभव हुआ।



संभव और इसके साथ खुलने की क्षमता की कमी से नहीं।

किन्तु मैं मर जाता था मुझे



सर, घर जाने के  
आम्र घर ही मरने

Kerala

Published by Hindustan Times on October 12, 2012

In April 2011 a study was conducted in Kerala to study the impact of mobile phones on honey bees. It was found that although bees are susceptible to diseases and are attacked by natural predators like wasps, the sharp decline in population of late, is more due the indiscriminate increase of mobile towers.

396

Mun. Ent. Zool. Vol. 6, No. 1, January 2011

## IMPACT OF MOBILE PHONES ON THE DENSITY OF HONEY BEES

**S. Sainudeen Sahib\***

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[Sainudeen Sahib, S. 2011. Impact of mobile phone on the density of Honey Bees. Munis Entomology & Zoology, 6 (1): 396-399]

**ABSTRACT:** Apiculture has developed in to an important industry in India as honey and bee-wax have become common products. Recently a sharp decline in population of honey bees has been observed in Kerala. Although the bees are susceptible to diseases and attacked by natural enemies like wasps, ants and wax moth, constant vigilance on the part of the bee keepers can overcome these adverse conditions. The present plunge in population ( $< 0.01$ ) was not due to these reasons. It was caused by man due to unscientific proliferation of towers and mobile phones.

**KEY WORDS:** Electromagnetic radiation, Apiculture, Colony collapse disorder.

### Kolkata (West Bengal)

Hindustan Times Mumbai, on Nov 24, 2010

## Kids in radiation cauldron on Park Street

Subhro Nivogi, TNN Jan 24, 2013, 02:43AM IST

**Tags:** Women | infertility | Department of telecommunication | Cancer

**KOLKATA:** Around 200 children- many of them toddlers - are living in a virtual microwave oven atop Karnani Mansion on Park Street.

Hemmed in by 40 cellular antennas that together transmit nearly 500 watt of power round-the-clock, the kids suffer constant headache, nausea, sleeplessness and fall ill with alarming regularity, say families who live in the complex. The terrace of Karnani Mansion houses 80 staff quarters with an average of five residents per dwelling.

In Kolkata around 200 children, many of them toddlers, are living near 40 cellular antennas that transmit very high levels of radiation. They suffer constantly from headache, nausea, sleeplessness and fall ill with alarming regularity.

Rajan Mathews, Director General of Cellular Operators Association of India, said: "Antennas are not supposed to be installed next to living quarters. If there are people residing on the roof, it is unsafe to have towers there."



# News from Other States

Published in Rajasthan Patrika, Indore on May 19, 2012

## Indore (Madhya Pradesh)

Mobile towers installed on the top floor of this school has been a cause of concern for hundreds of people in this Bank Colony. Several residents especially housewives have been complaining of migraine and fatigue. Residents are extremely concerned seeing the number of people and the rate at which they are falling sick.

People are afraid to take houses on rent in this area due to threat of hazardous radiation from the neighbouring cell towers.

## रेडिएशन ने दिया माइग्रेन

स्वीकृत में जिंदगी : मोबाइल टॉवर के विरोध में रहवासी मुखार



माइग्रेन सहित कई बीमारियों से पीड़ित बैंक कॉलोनी की महिलाएं।

इंदौर : 'जान ही लेंगे लंबा ये टॉवर, खींच भरि निरपेक्षी जी रहे हैं, स्कूल पर ही लंबा लंबा मोबाइल टॉवर, कई शिक्षावर्षों की, पर लू लू तक नहीं रंगी, हर घर में माइग्रेन और रक्तचाप के मरीज।'

यह पीड़ा है पश्चिम क्षेत्र स्थित बैंक कॉलोनी के वीकेंडो रहवासी की। सभी रहवासी मोबाइल टॉवरों के विरुद्ध स्वर मुखार होते ही अपना दर्द बर्णन करने लगे। अब लॉक टॉवर के डर से यहां

किराए पर मकान लेने से भी हिचकिचाहट लगे है। कॉलोनी निवास पर लंबा टॉवर लंबी के लिए खड़ा बना हुआ है। के रास्ते में टॉवर से निकलने वाली 'चर' खींचाव है। हर घर में काफ़ी बड़ा पुराचोखम खंड उनकी चल्ती मधुनिका जो सीता खंडित मधुनिका जै-

## स्कूल पर टॉवर लगाना प्रतिबंधित



स्टार पब्लिक स्कूल की तीसरी मंजिल पर लंबा टॉवर।

नगर निगम के निगरानी के

## Rajasthan HC bars mobile phone towers near schools & hosps

Abhinav Sharma | TIMES NEWS NETWORK

**Jaipur:** The Rajasthan high court on Tuesday ordered the relocation of mobile phone towers from educational institutions, hospitals and playgrounds in the state within two months.

It further ruled that they should be shifted at least 500 metres away from jails and 100 metres from monuments. A division bench comprising Chief Justice Arun Mishra and Justice N K Jain cited ob-

► **Telecom bodies' plea rejected, P 23**

servations of a inter-ministerial committee of the central government that radiation from mobile towers are hazardous to children and patients, while ordering the relocation.

The panel had in May emphasized that electromagnetic radiations from cell phones and towers have both thermal and non-thermal effect.

Published by Hindustan Times on October 12, 2012

## आदिनाथ मार्ग पर ज्यादा रेडिएशन सात लोगों को कैंसर, दो की मौत

रेडिएशन का स्तर खतरा से 120% अधिक

**SEVEN cancer cases in C-Scheme - Jaipur City**

आदिनाथ मार्ग पर रेडिएशन का स्तर खतरा से 120% अधिक है। सात लोगों को कैंसर, दो की मौत।

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## रेडिएशन से 6 को कैंसर का दावा

राजस्थान हाईकोर्ट ने कहा- तीन की मौत

**SIX cancer cases in Shalimar Bagh - Jaipur City**

रेडिएशन से 6 को कैंसर का दावा।

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## Jaipur (Rajasthan)

राजस्थान हाईकोर्ट ने कहा- तीन की मौत

अगर मोबाइल टावर सुरक्षित हैं... तो इनकी बीमारी का राज क्या है?

**If mobile towers were safe.. What is the mystery behind their illness?**

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The above articles have been published in local Rajasthan newspapers. Several cancer cases have been reported in various housing societies in Jaipur. Seven cancer cases in Adinath Marg and six in Shalimar Bagh were reported among the people living in the vicinity of cell towers. Cell tower operators, however, declared that the radiation from those towers are within the safety norms. To this, the local residents reacted by asking, "if the towers are safe, then what is the cause behind the large number of illnesses?" The Rajasthan High Court subsequently ordered the removal of mobile towers from educational institutions, hospitals and playgrounds in the state within a two month period.

A division bench of chief justice Arun Mishra and Justice N K Jain said "We have received a large number of communications from the state and across the country that mobile tower radiations are harmful and even the inter-ministerial committee of the central government in its meeting in May 2012 year has held so,"

## Round Table Conference on Mobile Tower Health in Delhi

The event took place in New Delhi on May 28, 2013 with the aim to take corrective measures in public interest. Senior officials from government bodies, industry and members from civil society, legal fraternity, academia, health groups and manufacturer were invited.

Mr. Sudhir Kasliwal from Jaipur flew down to Delhi to share the unfortunate incident his family went through. Two of his brothers and dog were diagnosed with cancer and one of his brother and dog died in 2012. Now that the towers have been switched off post their battle with the operators and regulators, birds and bees have started coming in and around his surrounding area again.

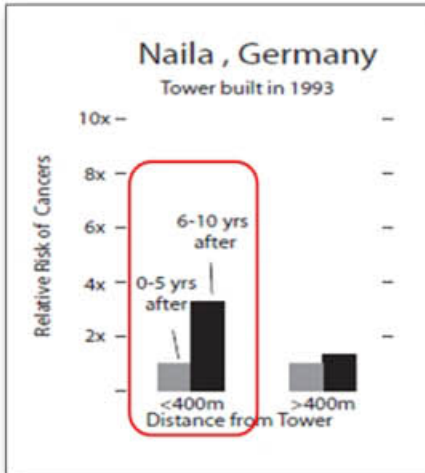
A Professor from Mayur Vihar talked about four cancer cases in his colony and mentioned that there were over 8 mobile towers in the vicinity.

Another gentleman whose mother has been suffering from constant dizziness and sister miscarried twice informed that his doctor held the mobile towers near their house responsible for the unfortunate incidents.



# Global Studies

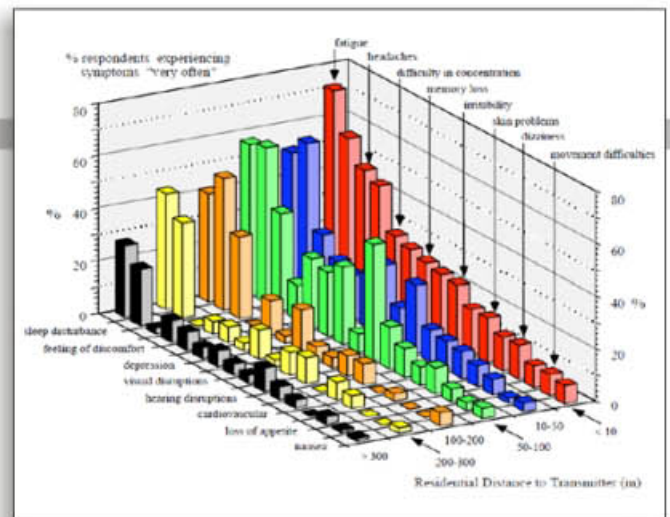
## Germany



Looking at the first five years (1993-1998), there was no significant cancer cases reported. However, for the period 1998 to 2004, large number of cancer cases were reported. Breast cancer topped the list, and cancers of the prostate, pancreas, bowel, skin melanoma, lung and leukemia were reported as well.

## Spain

People who lived closest to the cellular antennas had the highest incidences of health problems. Based on the symptoms experienced by people living in vicinity of base stations, this study recommend that the cellular phone base stations should not be sited closer than 300 meters to populations.



## Brazil

**New study : direct link to 4,924 cancer deaths from cellular antennas radiation.**

A study established a direct link between 4,924 cancer deaths in Belo Horizonte, Brazil, with the cell towers in the vicinity. This was reported in Science Hoie site, the news portal of the Brazilian Society for Progress Science. According to the study, over 80 percent of the deaths by different types of cancer, have occurred within 500 metres from the 300 identified cell towers in the city.

**World Health Organization (WHO) International Stakeholder Seminar on Radiofrequency Policies, June 5, 2013**

WHO had called for views of stakeholders and interested parties to prepare an Environmental Health Criteria monograph on radiofrequency (RF) fields.

Members of the International EMF Alliance and UK Radiation Research Trust raised their deep concern about the prevalence of precursory symptoms of electrosensitivity in the society and called for immediate action to be taken to prevent what could turn out to be a catastrophic disaster.

# Lighter Moments & More

We have carried out radiation measurements at hundreds of places. The received power is measured using an antenna, and it is measured in dBm. I would like to mention that some instruments give readings directly in mW/m<sup>2</sup> assuming frequency is 2GHz, which is not correct.

If in someone's house, measured radiation level is:

- More than -15dBm, we found health problems to occur within 1 to 2 years.
- If radiation level is between -30dBm to -15dBm, then health problems occurred in 5-10 years.
- If radiation level is less than -30dBm, then we have generally not found any health problems.

*The above health effects are based on individual sensitivity / immunity and time of exposure.*

Conversion from power in dBm to power density in milliWatt/square meter (mW/m<sup>2</sup>) for different frequencies is given in the following table.

Power (dBm)	Power density at different frequencies (Milli Watt/sq. meter)			
	900 MHz	1800 MHz	2140 MHz	2450 MHz
10 dBm	706.860	2,827.440	3,996.464	5,238.180
0 dBm	70.686	282.744	399.646	523.818
-10 dBm	7.069	28.274	39.964	52.382
-20 dBm	0.707	2.827	3.996	5.238
-30 dBm	0.071	0.283	0.399	0.524
40 dBm	0.007	0.028	0.040	0.052

## Bollywood Moments

Recalling lines of Kishore Kumar's famous song in the Bollywood movie, 'Padosan':

'Mere samne waali khirki mein ek chaand ka tukda rehta hai, Afsos yeh hai ke woh humse kuch ukhda ukhda rehta hai...'

I reworded the lyrics of this song with a pinch of wit and compassion so that people can effectively correlate to the experiences of a victim affected by high levels of radiation exposure from nearby cell towers. Here are my lines: Mere samne wali chath par ek cell tower khada rehta hai, Afsos yeh hai ki who mujhko dukhda deta rehta hai..

Published in Hindustan Times on May 20, 2013

## Juhi wants films to carry mobile phone warning

**DISCLAIMER** Like smoking, mobile phone scenes may soon carry cautionary advice



Reetika Subramanian

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**MUMBAI:** Every time a character in a film speaks on a mobile phone, across cinema halls in the country a statutory warning might pop up to warn viewers about the dangers of mobile phone tower radiation, if actor and anti-radiation campaigner Juhi Chawla's warning becomes...



Actor Juhi Chawla in a citizen's meeting to discuss health hazards caused by mobile tower radiation. ANSHUMAN POKHAR / IFT PHOTO

**PRECAUTIONARY GUIDELINES FOR MOBILE PHONE USERS**

"Several films show actors sleeping with mobile phones by their bedside. Studies show that this could adversely affect a person's health."

JUHI CHAWLA, actor and activist.



**SrBachan:** Cell phone towers and cancer .. strange findings .. an affected friend, lost his brother and then his dog also because of this ...!! April 12, 2012



**FarahKhanAli:** @SrBachan I know two people who got cancer because of the cell tower radiation April 12, 2012



**PritishNandy:** Incredible, the number of people getting cancer because of badly placed cell phone towers in Mumbai city. Time to raise our voice April 12, 2012



**FarOutAkhtar:** Isn't there a law that requires them (mobile tower operators) to get approval of the neighbourhood before subjecting them to hazardous radiation? 26 Nov 2012

Juhi Chawla : "Several films show actors sleeping with mobile phone by their bedside. Studies show that this could adversely affect a person's health".

This newsletter was possible due to the generous support of Rs.100, 001 from Vimlabai Garware Research Institute. If you would like to support this noble cause, please send your cheque in the name of "Registrar, IIT Bombay" the office address on the first page. If anybody overuses cell phone and/or living next to cell towers has experienced health problems, please write to us for feedback and suggestions at [celltower.newsletter@gmail.com](mailto:celltower.newsletter@gmail.com). You can also call me during the day on: (022) 2576 7436 or (022) 2576 4433.