



AUGUST EDITION 2008

# EME UPDATE

MOBILE TELECOMMUNICATIONS HEALTH AND SAFETY NEWS

- SWEDISH GOVERNMENT REPORT FINDS NO MOBILE HEALTH RISK >  
- DESPITE CONTROVERSY
- DRIVING BANS QUESTIONED: DRIVER EDUCATION NEEDED >
- MOBILE POPCORN VIDEO SHOWN TO BE A VIRAL MARKETING HOAX >
- PSYCHOLOGICAL EXPECTATION MAY EXPLAIN SENSITIVE INDIVIDUALS >
- EVERYDAY EXPOSURE TO MOBILE EMISSIONS VERY LOW >
- NO GROUNDS TO RESTRICT CHILDREN'S MOBILE USE >
- AMTA REJECTS TODAY TONIGHT CANCER CLAIMS >
- CLAIMS MOBILES WILL HARM YOUR BABY ALARMIST >
- AUSTRALIANS RELY ON MOBILE PHONES IN EMERGENCIES >
- NEW INFORMATION RESOURCE FOR MOBILES AND HEALTH PROVES POPULAR >  
IN BRIEF >

# EME UPDATE



## SWEDISH GOVERNMENT REPORT FINDS NO MOBILE HEALTH RISK - DESPITE CONTROVERSY

A Swedish Government appointed expert group on electromagnetic fields has attracted criticism over allegations it selectively reviewed the available research on the subject, despite the group concluding the use of a mobile phone is not associated with brain cancer.

Louis Slesin, the editor of online newsletter *Microwave News*, initiated the criticism against the Swedish Radiation Protection Authority's 2008 report on Electromagnetic Fields when he publicised the fact the report did not review a critical study that pointed to a possible long-term risk.

However, the expert group's chairman Professor Anders Ahlbom hit back at the claims saying the

group did in fact review the Lahkola et al INTERPHONE paper.

"Questions have been received why the Fifth Annual Report from SSI's Independent Expert Group on Electromagnetic Fields does not mention the paper by Lahkola et al (Lahkola et al., *Int. J. Cancer* 2007)," Professor Ahlbom wrote in a special comment attached to a revised version of the expert group report released in April.

The revised fifth annual report from the Swedish Radiation Protection Authority's Independent Expert Group on Electromagnetic Fields can be found at:

[WEB LINK >](#)



Chairman of the  
SSI Independent  
Expert Group  
Professor Anders  
Ahlbom

"The Expert Group would like to comment that the paper was discussed by the group and was part of the basis for the conclusions. However, it was by mistake overlooked when preparing the report. The Expert Group regrets this accidental omission," Professor Ahlbom said.

The Lahkola et al INTERPHONE report can be found at:

[WEB LINK >](#)

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## SWEDISH GOVERNMENT REPORT FINDS NO MOBILE HEALTH RISK - DESPITE CONTROVERSY

– continued from previous page

Despite the controversy surrounding the oversight of the reference to the Lohkola et al paper, the Swedish expert group report provides key updates on the state of scientific research on radio frequency electromagnetic fields.

In particular, the report found no evidence of a link between short-term mobile phone use and brain tumours.

“Short-term use of mobile phones does not appear to be associated with brain or head and neck cancer risks in adults. However, other outcomes have not been studied, no studies on children or adolescents have been done, and long-term use has not been fully evaluated,” the report states.

On the topic of mobile phone towers, the expert group said that despite the few studies that were available having major methodological shortcomings, base station emissions are not expected to cause health effects.

“However, the exposure to the general population that results from transmitters is very weak and one would not expect such exposure to produce a health risk as discussed in the previous report. Indeed, one would assume that if RF exposure at low levels is associated with a health risk it would be considerably easier to detect it in studies of mobile phone users, or highly exposed occupational groups.

“The overall conclusion is that exposure from transmitters is



unlikely to be a health risk,” the expert group concluded.

In the introduction of the report, the group explains that they looked only at studies that were published or accepted for publication in English-language, peer-reviewed scientific journals, and eliminated those that were not relevant to the report or were of insufficient scientific quality.

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

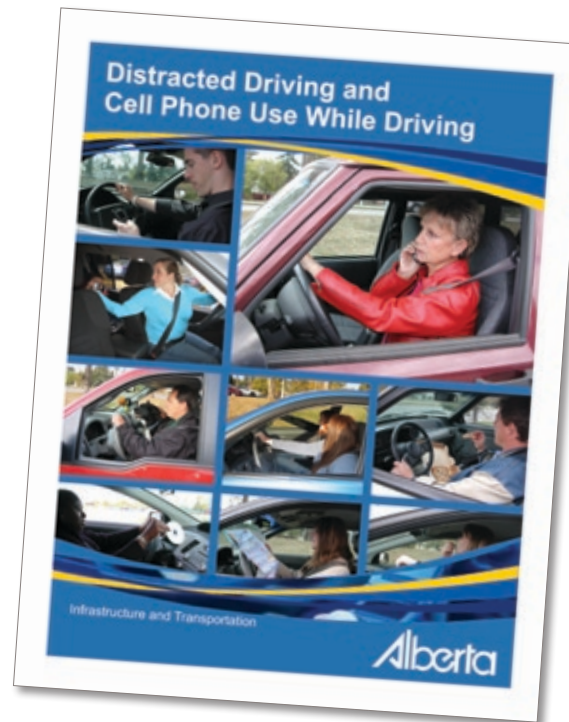
## DRIVING BANS QUESTIONED: DRIVER EDUCATION NEEDED

Policy makers worldwide have started to focus on the need to educate drivers about the different driving conditions faced when using mobile phones rather than just rely on laws banning hand-held mobile phones in vehicles.

The Alberta government in Canada recently released a study that offered several arguments opposing proposed laws to ban hand held mobile phone use while driving in the province.

The report by the Alberta Department of Infrastructure and Transport concluded that legislation banning the use of mobile phones while driving has not shown to reduce the number of collisions.

“Despite cell phone bans in over 45 countries, there is no available research suggesting that such legislation has contributed to



a reduction in the number of collisions,” the report concluded.

“Internationally, those jurisdictions who continue to run post-legislation public awareness campaigns and who have strict,

publicized enforcement campaigns tend to have better, longer-term compliance.”

The reported found although there are numerous studies linking driver mobile phone use with increased collision involvement, there is no evidence that any jurisdiction has achieved high levels of compliance with mobile phone bans, and therefore, a reduction in the number of collisions.

“There is consensus that research, awareness and education, and cooperative government-industry efforts are essential to successfully reducing distracted driving,” the report concluded.

The report can be found at:

[WEB LINK >](#)

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## DRIVING BANS QUESTIONED: DRIVER EDUCATION NEEDED

– continued from previous page

However a recent Californian study says using hands-free while driving can lower the road toll but this needed to be combined with driver education about adverse driving conditions.

The study by the Public Policy Institute of California (PPIC) estimated that after the introduction of the new law on July 1, California will likely experience 300 fewer traffic fatalities a year. The state has more than 4000 traffic deaths a year. These findings differ from previous research that has questioned the effectiveness of hands-free laws in improving traffic safety. Previous research has found that drivers using hands-free devices were just as distracted as those using hand-held phones.

“These studies have relied on surveys of drivers, laboratory simulations, and observations in vehicles specially outfitted to record a driver’s behaviour and distractions. However, these studies using these approaches do not help predict the effects of a hand-free law,” said Jed Koko, PPIC research fellow and author of the study.

“Mobile phone use cannot be measured accurately at the time of traffic collision. A driver may hang up to avoid looking negligent and police can’t easily access mobile phone records.

“Drivers make real-time decisions that cannot be measured in a lab. They decide whether and when to use their phones. The

**Table 1. Sources of distraction among distracted drivers involved in collisions.**

Distraction	Drivers (%)
Outside person, object or event	29.4
Adjusting radio, cassette, CD	11.4
Other occupant in vehicle	10.9
Moving object in vehicle	4.3
Other device/object brought into vehicle	2.9
Adjusting vehicle/climate controls	2.8
Eating or drinking	1.7
<b>Using/dialing cellular phone</b>	<b>1.5</b>
Smoking related	0.9
Other distraction	25.6
Unknown distraction	8.6
<b>Total Drivers</b>	<b>100</b>

Source: AAA Foundation for Traffic Safety, “The Role of Driver Distraction in Traffic Crashes,” Washington, DC: Jane C. Stutts et al. May 2001.

question is how these laws might change drivers’ likelihood of using any mobile phone, whether it’s handheld or hands-free.”

*continued next page ...*

NEXT >  
BACK >  
HOME >  
PRINT >  
EXIT >

# EME UPDATE



## DRIVING BANS QUESTIONED: DRIVER EDUCATION NEEDED

*– continued from previous page*

The study found:

- Mobile phone ownership appears to contribute to traffic deaths, but only under certain driving conditions. If the weather is bad and the roads are wet, the effect is large. There is no observable effect in good weather or on dry roads.
- Laws requiring hands-free devices have reduced fatalities in adverse conditions by 30-60%, depending how long the law has been in effect.
- Based on the experience of New York, which in 2001 became the first state to have a hands-free law, fatalities in adverse conditions may remain at a lower level several years after the laws take effect.

The study can be found at:

[WEB LINK >](#)

AMTA Chief Executive Officer, Chris Althaus, reminded all drivers that using a legal hands-free mobile phone while driving was not appropriate in all driving circumstances.

“We stress that although a hands-free device can reduce the physical effort to make and receive calls, drivers should avoid making calls in adverse traffic, road or weather conditions and avoid complex or emotional conversations. Safety is the most important call drivers can make.

“While technology can address physical and visual factors, education and awareness is required to address cognitive factors. Therefore, the most useful action governments can take is to help educate drivers about the appropriate use of mobile telecommunications products in vehicles.

“AMTA has also urged governments to take the ‘education’ path on all driving distractions and has offered to partner governments in such a campaign.”

AMTA’s driving safety tips are widely used by fleet owners and motoring organisations and can be viewed under consumer tips at:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## MOBILE POPCORN VIDEO SHOWN TO BE A VIRAL MARKETING HOAX

Apparently home-made videos appearing to show corn being popped by the heat given off by ringing mobile phones which appeared on *YouTube* have been shown to be a hoax.

Some early versions of the video – several were posted in different languages at roughly the same time – were watched millions of times across the internet and generated hundreds of comments.

Despite the scientific impossibility of the stunt – mobile phones do not produce anywhere near enough heat to cook popcorn – some *YouTube* commenters appear convinced that the clips provided evidence of the dangers of technology. They range from “It



is not possible” to “It will work if you face the antennas in the same direction as the kernels”.

But like a number of recent ‘unbelievable’ videos appearing on *YouTube* the popcorn footage has been shown to be a viral advertisement designed to flabbergast the public. And only later does the marketer

acknowledge their involvement in the deception.

A clue to the hoax is that the popcorn started to pop when the phones were ringing; a mobile phone is transmitting only intermittently to let the network know where it is until the call is answered and connects to the network.

Eventually, Cardo Systems, a Pittsburgh-based manufacturer of wireless Bluetooth headsets, put out the word that it was all a hoax – and they were proud they had deceived consumers.

“We wanted to generate more buzz about Cardo Systems,”

*continued next page ...*

NEXT >  
BACK >  
HOME >  
PRINT >  
EXIT >

# EME UPDATE



## MOBILE POPCORN VIDEO SHOWN TO BE A VIRAL MARKETING HOAX

– continued from previous page

Kathryn Rhodes, Cardo's national marketing director, said in a newspaper interview "We found it tremendously successful."

Their website also proudly displays the viral campaign assessment by the media.

[WEB LINK >](#)

The advertisement was then released along with the sales pitch for their products.

[WEB LINK >](#)

Later Cardo explained how the hoax videos were made using digital editing in a *CNN* interview.

[WEB LINK >](#)

Media Outlet	Quote
CNN	"A stealth marketing campaign by <b>Cardo Systems</b> ... a YouTube hit"
The New York Times	"... turns out that these "amateur" videos are, in fact, professionally produced hoaxes. They were commissioned by a Bluetooth headset maker, <b>Cardo Systems</b> "
YAHOO! TECH	"... it's all a viral marketing stunt (and a hugely successful one, at that) from Bluetooth headset maker <b>Cardo</b> ."
PC WORLD	"... one company scored big with their viral videos. <b>Cardo Systems</b> , ...and I'm still convinced they were brilliantly edited"
WIRED	"The popcorn videos are the latest viral goofs to catch on with internet video fans, and they've spawned clever spinoff clips"

Urban myth websites have also caught up with the hoax:

[WEB LINK >](#)

[WEB LINK >](#)

And just in case you're still not convinced, there is a version pointing out the dangers of bananas:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## PSYCHOLOGICAL EXPECTATION MAY EXPLAIN SENSITIVE INDIVIDUALS

Three research reports published this year have ruled out the possibility mobile phones are responsible for the symptoms of a select group of people self-diagnosed hypersensitive people.

Furthermore, early indications are showing the symptoms, which include fatigue, headaches, dizziness and skin problems, may actually be the result of negative expectations, otherwise known as a psychosomatic or nocebo effect.

Electrical hypersensitivity (EHS) is a condition in which people claim that electricity or mobile phone electromagnetic emissions make them ill.

In the first study, Dr Martin Roosli of the University of Bern in Switzerland conducted a systematic review of the literature on hypersensitivity and concluded that



the nocebo effect is responsible for at least some of the cases.

“There was no evidence that EHS individuals could detect presence or absence of RF-EMF better than other persons. There was little evidence that short-term exposure to a mobile phone or base station causes symptoms ... Some of the trials provided evidence for the occurrence of nocebo effects,” Dr Roosli said.

Dr Roosli’s study can be viewed at:

[WEB LINK >](#)

In the second study, Dr Caterina Cinel and colleagues examined the response of 496 volunteers exposed to radio frequency electromagnetic fields (REF). Published in the Journal *Psychosomatic Medicine*, the study found exposure to the mobile phone like emissions caused no consistent significant effects or symptoms to the volunteers.

“The present study does not provide consistent evidence that active exposure to mobile phone REFs can affect subjective symptoms. The results not only provide reliable evidence but are also consistent with recent studies,” the authors concluded.

The study can be found at:

[WEB LINK >](#)

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

## PSYCHOLOGICAL EXPECTATION MAY EXPLAIN SENSITIVE INDIVIDUALS

– continued from previous page

In the third study, Dr James Rubin and colleagues from the King's College Institute of Psychiatry in London investigated the psychological factors associated with self-reported sensitivity to mobile phones.

After analysing 52 people who were sensitive to mobile phones, 19 people who claimed to be 'electrosensitive' and sensitive to mobile phones, and 60 normal control subjects, the results showed the 'electrosensitive' group experience substantially worse health than any other group.

"The results of experimental provocation studies have repeatedly shown that people who report electrosensitivity are unaffected by acute exposure to EMF... For a minority, the answer may be that they are experiencing

*... these symptoms may be due to pre-existing psychiatric conditions as well as stress reactions as a result of worrying about EMF health effects, rather than the EMF exposure itself ...*

– WHO fact sheet 296, Dec 2005

symptoms as a result of some other illness – symptoms that they mistakenly attribute to the presence of EMF," the authors conclude.

Dr Rubin's study can be viewed at:

[WEB LINK >](#)

The World Health Organisation (WHO) has issued a fact sheet stating there is no connection between mobile phones and their base stations to electrical hypersensitivity.

"The majority of studies indicate that EHS individuals cannot detect EMF exposure any more accurately than non-EHS individuals. Well controlled and conducted double-blind studies have shown that symptoms were not correlated with EMF exposure," the WHO said.

Furthermore, the WHO agrees there is some evidence showing negative expectations could be responsible for the symptoms experienced.

"There are also some indications that these symptoms may be due to pre-existing psychiatric conditions as well as stress reactions as a result of worrying about EMF health effects, rather than the EMF exposure itself."

A copy of the WHO fact sheet can be found at:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE

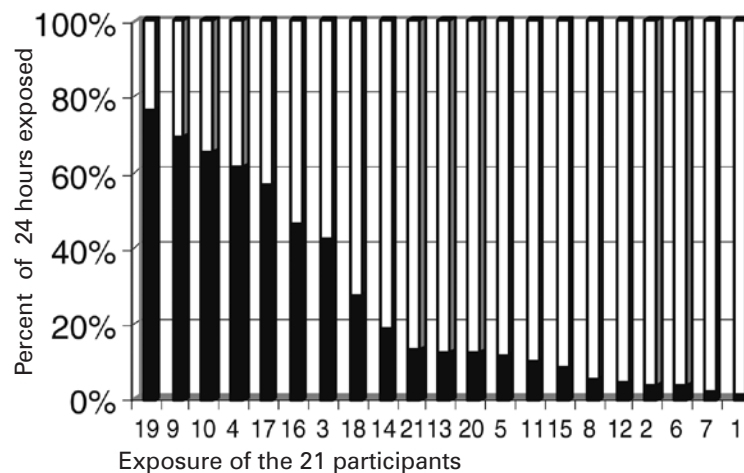


## EVERYDAY EXPOSURE TO MOBILE EMISSIONS VERY LOW

Everyday exposure to the emissions from mobile phones and their base stations are so low that devices specifically designed to measure their intensities have difficulty registering a recording, according to a new study by the Hungarian National Research Institute for Radiobiology and Radiohygiene.

After equipping 21 participants for 24 hours with a personal exposure metre (PEM) to measure the amount of time in, the strength and type of the emission they were exposed to, the authors found the participants were exposed to a very little amount of radiofrequency (RF) energy.

“Participants spent small fraction of the total measuring time above the detection limit of the meter in average,” the authors report.



Most of the time the 21 participants were exposed below the measurement sensitivity limit of the personal exposure metres (white area). Those exposed above the detection limit (dark area) are still well below international safety limits.

### Important Notes

- The measurement sensitivity for the exposure metres starts at 0.05 V/m
- Dark shading represents percent of time spent above the detection limit – the white area represents exposure at 0.05 V/m or below.
- The highest average exposure for all channels during the 24 hours was 0.119 V/m
- The Australian safety standard is set between 27 and 61 V/m

□ E=0.05 V/m  
■ E>0.05 V/m

“Half of the subjects spent less than 10%, and only one third of the participants spent 40–70% of 24-h recording time in RF fields above the detection limit of the PEM.”

The report also notes that the strongest intensity and longest exposure on average the

participants experienced during the 24 hour period was from FM radio sources.

“The highest exposure resulted from FM sources,” lead author professor Gyorgy Thuroczy

*continued next page ...*

NEXT >  
BACK >  
HOME >  
PRINT >  
EXIT >

# EME UPDATE



## EVERYDAY EXPOSURE TO MOBILE EMISSIONS VERY LOW

*– continued from previous page*



reported. “In the present study, we found that the longest exposure time over the detection level of the PEM device occurred from the FM broadcast channels.”

Despite FM radio transmitters emitting the strongest source of RF, the study found that all the channels measured (which included radio, television, mobile phones and base stations) were very low and well within international safety guidelines.

“Average field intensities for the total 24-h measuring period in all channels were very low. The range was between 0.05 and 0.119 V/m,” the report states.

The participants’ highest exposure for any channel was detected during times when they were travelling, while their lowest exposure was detected while they were at home in bed.

The purpose of the study was to evaluate the usefulness of an RF personal exposure metre for assessing individual RF exposures in an urban environment. The authors report that such metres do prove useful and provide more accuracy than other methods of measurement.

The study can be found at:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## NO GROUNDS TO RESTRICT CHILDREN'S MOBILE USE



A new study investigating the health risks of mobile phone use by children has found there is no reason to restrict children's mobile phone use and there is no evidence to suggest any changes need to be made to existing exposure limits.

Researcher Norbert Leitgeb of the Graz University of Technology in Austria reviewed the state of current scientific evidence and existing statements by international health authorities to assess and give guidance on the use of mobile phones by children.

Dr Leitgeb's study concluded the body of data and the international health risk assessments do not provide evidence of health risks to children.

"There are no sufficient grounds to generally condemn mobile phone use by children, in particular, nor is there an established basis for pinpointing a specific age limit (above 3 years) as has been done by some overreacting committees."

The research abstract can be viewed here:

[WEB LINK >](#)

Also, after examining the international safety standards for mobile phone use, Dr Leitgeb found current limits protect children enough.

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## NO GROUNDS TO RESTRICT CHILDREN'S MOBILE USE

*– continued from previous page*



Graz University of Technology in Austria

“Based on the assessments of the international committee and established knowledge on children’s development it can be concluded that existing exposure limits do in fact provide reasonable safety,” he said.

In his research paper Dr Leitgeb explains that as the number of children using mobile phones continues to increase, with the onset of mobile phone use starting earlier and earlier, concerns have also risen about the safety of mobile phones and whether children might be at a higher risk.

However, many authoritative institutions have varying positions on the use of mobiles by children,

and offer conflicting advice to parents who remain unsure about the safety of mobile phones.

“In view of such controversial positions of highly reputable organisations, it is not surprising that confusion is widespread and parents can hardly decide whom to believe and whether or not their children might be at higher risk,” he stated.

In his conclusion Dr Leitgeb notes there is still some uncertainty regarding the long-term effects of mobile phone use but strongly warned against misinterpreting the application of the precautionary principle as evidence for definite risk.

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## AMTA REJECTS TODAY TONIGHT CANCER CLAIMS

Mobile phone users can be reassured that leading independent, expert health bodies say there is no link to brain cancer, says the Australian Mobile Telecommunications Association (AMTA), who relies on such advice.

The industry was responding to a recent *Today Tonight* program that claimed mobile phones were responsible for causing brain tumours.

AMTA CEO Chris Althaus said the safety of mobile phone use is an issue that the industry takes very seriously and the telecommunications industry relies on the independent judgements of expert bodies, such as the World Health Organisation (WHO), regarding safety issues.

AMTA's response to *Today Tonight* can be viewed on their website:

[WEB LINK >](#)



AMTA CEO Chris Althaus

The *Today Tonight* story featured brain cancer patients David Smith and Enrico Grani, who both blamed their tumours on heavy mobile phone use spanning over 10 years.

*Today Tonight* claimed that the ear nerve cancer Mr Smith had been diagnosed with was a type of tumour that studies have linked to mobile phone use.

An article on the *Today Tonight* story can be found here:

[WEB LINK >](#)

Mr Althaus said no one should have to endure the misfortune that has befallen David Smith, Enrico Grani and their families. Whilst their desire to identify what caused their illness is understandable, there is no accepted scientific basis to equate it to the use of mobile phones.

"Brain cancer occurs in about six of every 100,000 adults under the age of 65 each year around the world. Although it is rare disease, this statistic alone means that 60 in every million mobile phone users could by chance alone be expected to develop brain cancer. While unfortunate, this statistical fact is not and cannot be related by sound science to the use of mobile phones," he said.

A video of *Today Tonight* segment can be viewed here:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EME UPDATE



## CLAIMS MOBILES WILL HARM YOUR BABY ALARMIST

Researchers and medical experts say recent media reports that claimed a pregnant woman's mobile phone use could cause behavioural problems in her baby later in life raised unnecessary alarm.

In the study, published in the journal *Epidemiology*, researchers at the Universities of California Los Angeles (UCLA), in the US, and Aarhus, in Denmark, issued a survey to mothers of 13,159 children in Denmark. The survey asked the mothers questions about their use of mobile phones during their pregnancy as well as their child's behaviour and their current mobile phone use.

The researchers found that the mothers who said they used mobile phones during their pregnancy also reported a higher level of



behavioural problems in their children.

Although the results suggested a link between increased risk of hyperactivity, impulsivity and difficulty concentrating in children and mobile phone use during pregnancy, medical experts – including the paper's authors – said it would be a mistake to assume that the findings were conclusive.

In fact, Dr. Jorn Olsen, professor and chair of epidemiology at UCLA and a co-author of the paper, told USA's *ABC News* in May that media coverage of the research was off target.

Olsen specifically referred to a report in the British press with the headline 'Warning: Using a Mobile Phone While Pregnant Can Seriously Damage Your Baby.'

"That's clearly not what we wanted to suggest, and we think that there is no reason that pregnant women should be very alarmed at the findings we have," Olsen told the media.

"I think that a number of journalists broke the story on this and that they did not take all of the assumptions into consideration."

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

## CLAIMS MOBILES WILL HARM YOUR BABY ALARMIST

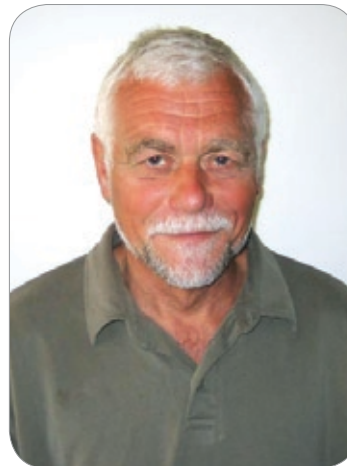
– continued from previous page

### CONFOUNDING FACTORS

In the paper the authors went to great lengths to advise readers to interpret their results with caution and detailed numerous confounding factors (i.e. that other exposures may actually be responsible for the observed association) that may have had a significant effect on the results.

Such factors include the lower social-occupational status of the mothers and mothers were more likely to have suffered from a mental disorder or psychiatric illness. Additionally, there was no information on the history of psychiatric disorders in the fathers.

“These results were unexpected and should be interpreted with caution. Observed associations are not necessarily causal. We have no known biological mechanisms



Professor  
and Chair of  
Epidemiology  
at UCLA,  
Dr Jorn Olsen

to explain these associations, and confounding by unmeasured causes of behavioural problems could have produced these results,” the paper says.

The research abstract can be found at:

[WEB LINK >](#)

Also the British National Health Service issued a statement saying

the study did not prove there is a link between mobile phone use and behavioural problems in children, and pregnant women should not be alarmed.

“The question of whether or not mobiles are responsible for behavioural problems in children is not answered by this study. More research in prospective studies is needed to ascertain this. For now, pregnant women should not be overly alarmed. This study doesn’t offer convincing evidence that there is a link between exposure while in the womb or after and neurological performance in children,” the statement concludes.

The British National Health Service response to the study can be viewed here:

[WEB LINK >](#)

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

## AUSTRALIANS RELY ON MOBILE PHONES IN EMERGENCIES

Mobile phones now account for almost two thirds of all calls to emergency services in Australia, new figures released in April by the Australian Communications and Media Authority (ACMA) show.

According to ACMA's Communications Report for 2006-07, calls from mobile phones to emergency services increased by 11.3 per cent over the last five years, with 62.2 per cent of all calls made to the emergency number during 2006-07 originating from a mobile phone.

The report showed mobile phones accounted for the largest number of calls to emergency services since 2002, with more than 7.5 million mobile phone calls made to '000' and '112' in 2006-07.

In stark contrast, fixed-line phones recorded a significant decline over the last five years, from 48 per cent to 37.1 per cent of all calls made to emergency services.

Table 4.8: Call origin by service type for calls to 000 and 112, 2002-03 to 2006-07

	2002-03	2003-04	2004-05	2005-06	2006-07
Facsimile	129,948	192,054	49,328	27,741	31,626
Payphone	847,295	782,767	526,521	555,624	540,120
Other fixed	4,587,111	4,531,340	3,292,050	3,620,865	3,936,864
Mobile	5,768,344	7,262,227	6,912,810	7,274,901	7,547,031
Total	11,332,698	12,768,388	10,780,709	11,479,131	12,055,641

Source: *Emergency call person (Telstra)*

The Australian Communications and Media Authority's 2006-07 Communications Report can be found at:

[WEB LINK >](#)

Another highlight in the ACMA report was the surpassing of 100 per cent penetration rate of mobile services in Australia. There is now more than one mobile service for every Australian, with 21.26 million mobile phone services in operation at 30 June 2007, a 7.6 per cent increase from 19.76 million the year before.

A significant increase in 3G mobile customer numbers helped drive that growth, which was in contrast to a small but continued decline in fixed-phone services over the last financial year.

"There are now more than 4.5 million 3G mobile services in Australia, a 192 per cent increase between 30 June 2006 and 30 June 2007," said Chris Chapman, ACMA Chairman.

The number of fixed services dropped from 11.26 million to 10.92 million during the same period.

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

# EMF UPDATE



## NEW INFORMATION RESOURCE FOR MOBILES AND HEALTH PROVES POPULAR

The screenshot shows a webpage titled "Mobile Phones & Health" from the "EMF Explained Series - Wireless Technology and Health". The page is dated July 2008. It features several sections:

- Overview:** A mobile phone is essentially a small low powered radio transmitter and receiver which connects to a mobile network to enable telephone calls. Mobile phones use radio frequency (RF) fields to send and receive calls, texts, emails, pictures, web, TV and downloads. A radio signal is sent to the nearest base station, which sends the signal to a digital telephone exchange and on to the main telephone network. This connects the signal to the receiving phone, again via a base station if it is another mobile phone.
- Are mobile phones safe?:** Over 50 years of scientific research has already been conducted into the possible health effects from mobile phones, base stations and other wireless services. The data from this research has been analyzed by many expert review groups. Weighing the whole body of evidence, there is no evidence to convince experts that exposure below the guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) causes any health risks for adults or children. On mobile phone safety the World Health Organisation advise: "The overall evidence available to date does not suggest that the use of mobile phones has any detrimental effect on human health".
- How do mobile handsets work?:** When a mobile handset is switched on, it periodically communicates with the base station which provides coverage in the specific area where they are located. In this way, the mobile phone sends its position to the mobile network so that the user can make or receive a call from any point where there is coverage from the service provider. If the subscriber is on the move then the signal transmitted by the mobile phone is identified by the respective base station in the area in which he or she is moving. Each time we make or receive a call using our mobile phone, radio signals in the form of electromagnetic waves are transmitted from our handset to the closest base station. The base station connects our call to the main telephone network.
- How much power does a mobile phone use?:** A mobile phone is a low powered device. For GSM phones, the maximum transmitter power is approximately 0.25 watts and the minimum is approximately 0.002 watts. For other mobile phone technologies the maximum power is similar but the minimum power may be lower due to a wider range of available power levels. During a phone call the transmitter will automatically reduce power to the lowest possible to maintain a good quality connection. The power is automatically reduced to minimize interference to other nearby mobile phones. This also means lower EMF.
- When do mobile phones use the lowest power?:** Mobile phones use the lowest possible power when in a good reception or coverage area. This is typically when close to a mobile base station as the phone only has to transmit over a short distance back to the nearest base station. The mobile network automatically adjusts the mobile phone and base station power required to maintain a connection. So mobile phones produce the lowest EMF when in a good coverage area and close to a base station.
- Use of hands-free devices:** Compliance with strict rules ensures that mobile handsets placed on the market operate properly and comply with EMF safety guidelines. However, people who want to further reduce their exposure to RF fields can use hands free devices. In addition to being easy to use, these devices allow the handset to be kept away from the body. Independent tests confirm that these devices when used can reduce the quantity of RF energy absorbed by the body.

Current WHO advice: <http://www.who.int/pmh-ehp/en/>

The World Health Organisation advise: "Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects."

A new website [www.emfexplained.info](http://www.emfexplained.info) launched in July by the mobile phone industry to help people interested in a better understanding of radio frequency electromagnetic fields (EMF) and wireless issues has proved very popular.

After only one month in operation the site registered more than 5000 page visits from users in more than 50 countries including Australia, UK, USA, Germany, Egypt, India and Brazil.

The EMF Explained Series ([emfexplained.info](http://emfexplained.info)) provides up-to-date, easy-to-access layered information on the scientific consensus among leading public

health and regulatory authorities from around the world on health and EMF.

The site took more than 10 months to develop and involved research, collaboration and input from representatives across the globe.

So far the most popular pages on the site include the Mobile Myths section which provides scientific reasoning debunking the hoax that mobile phones can cook eggs and popcorn.

Information on [emfexplained.info](http://emfexplained.info) is referenced from leading international health authorities, such as the World Health Organisation, for assessments of

- NEXT >
- BACK >
- HOME >
- PRINT >
- EXIT >

EMF Explained Series

# EME UPDATE



## NEW INFORMATION RESOURCE FOR MOBILES AND HEALTH PROVES POPULAR

*– continued from previous page*

safety and health impacts of EMF and wireless issues. The mobile phone industry relies on such independent experts and complies with internationally-recognised safety standards.

The Australian Mobile Telecommunications Association (AMTA), the peak industry body representing the mobile telecommunications industry in Australia, developed the site in conjunction with two leading international industry associations, the GSM Association and the Mobile Manufacturers Forum.

The EMF Explained Series can be viewed at:

[WEB LINK >](#)

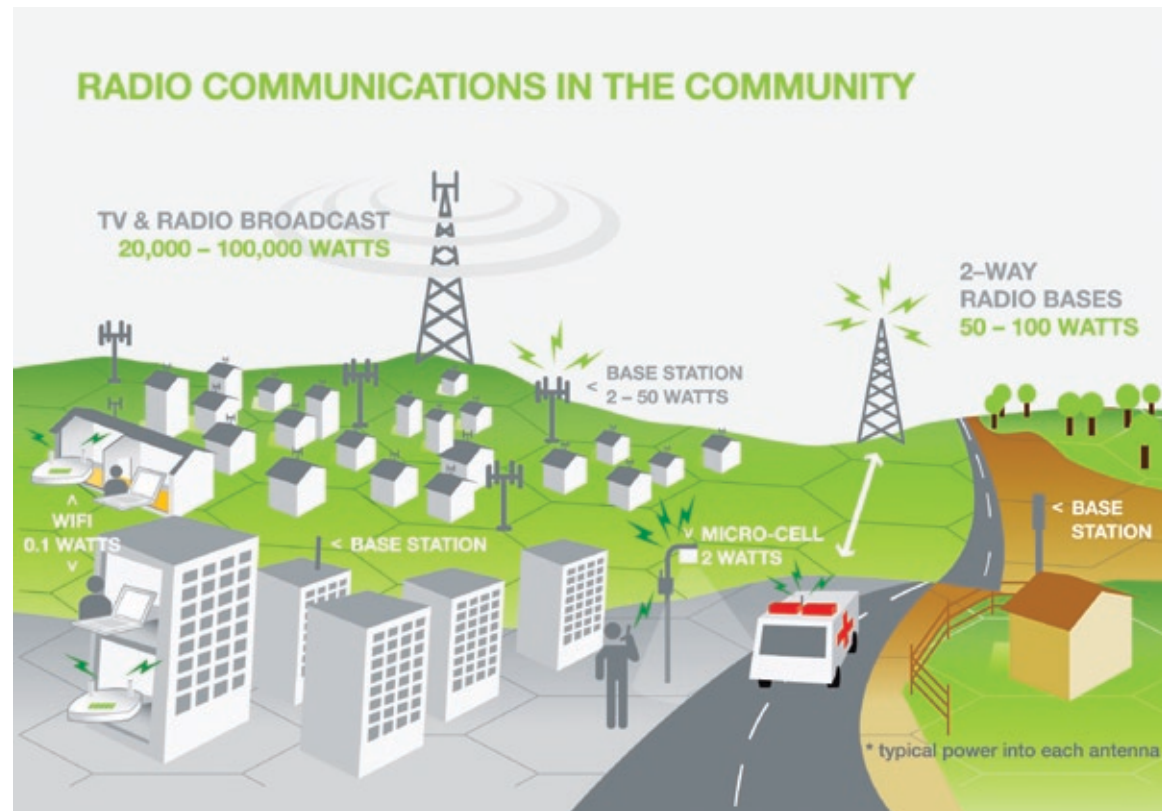


Illustration of radio communications in the community from the EMF Explained Series.

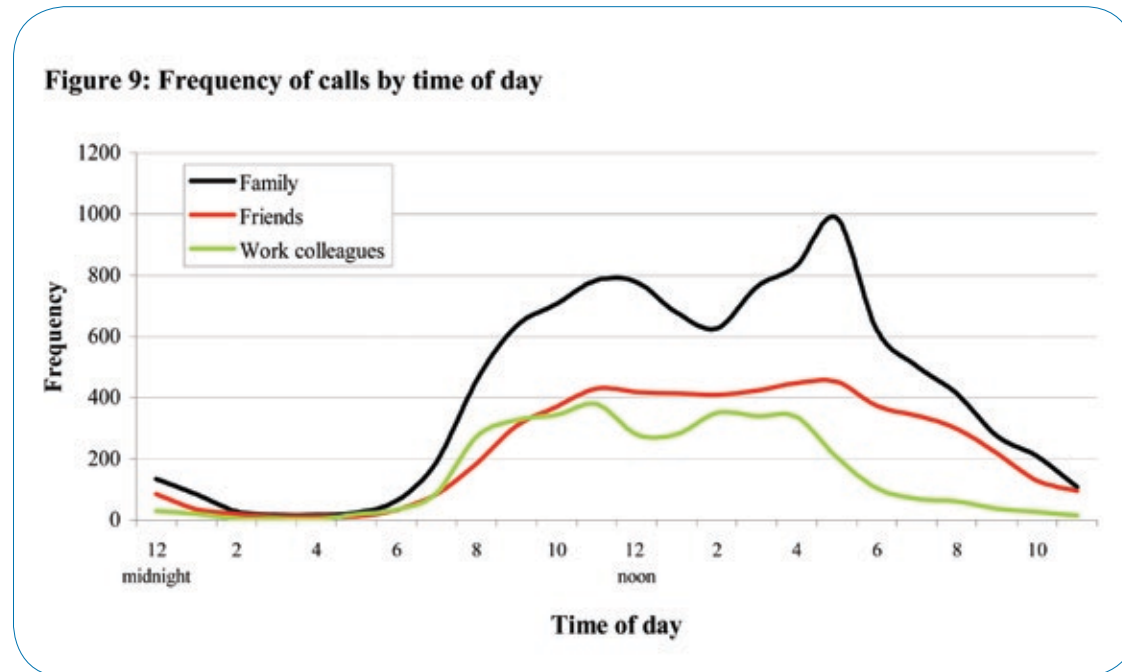
[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

### REPORT FINDS MOBILE PHONES HELP WORK/LIFE BALANCE

More than half of respondents to the first Australian study to assess the social impact of mobile phones believe that they have helped to balance their family and working lives.

The survey's final report found that only 12 per cent of the 13,978 calls made on mobile phones were work-related. Conversely, the mobile phone is used overwhelmingly for contacting family (49%) and friends (26%). The remainder of calls are to service providers or to pick up messages from voicemail (less than 15%).

Among the 49 per cent of calls to family members, for both men and women, the highest proportion are calls to one's spouse (18%). Women are disproportionately likely to phone their children



(13%), parents (11%) and extended family (12%).

The project, based on collaboration between AMTA, university-based researchers and the Australian Research Council, collected nationally representative data from a sample of 2185 individuals, comprising 1905 individuals from

1435 on-line households and 280 individuals in 280 off-line households.

The final report can be downloaded from:

[WEB LINK >](#)

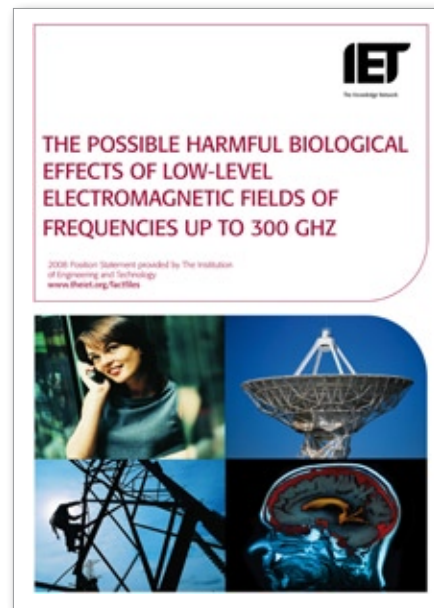
*continued next page ...*

### UK ENGINEERS INSTITUTION WARNS POLICY MAKERS ON PRECAUTIONARY APPROACH

The Institute of Engineering and Technology issued a warning for governments and policy makers to consider the impact of health related precautionary measures for low-level electromagnetic fields (EMF), after it found no scientific evidence of health risks.

A new position statement released by the institute in May, based upon a review of 829 scientific papers by six of the UK's leading scientists and engineers, found no reason for precautionary measures.

“At higher frequencies, the existing data do not provide persuasive evidence that harmful health effects exist... experimental studies have failed to demonstrate consistent effects and no mechanism has



been established whereby low-level exposure to radiofrequency fields can cause harm,” the Institute states.

The Institute's 2008 Position Statement can be downloaded at:

[WEB LINK >](#)

Chairman of the Institute's Biological Effects Policy Advisory Group (BEPAG), Professor Tony Barker, said the scientific evidence and the many demonstrable benefits of telecommunications need to be taken into account before issuing precautionary advice.

“We are of the opinion that all factors, together with convincing scientific evidence, should be taken into account by policy makers when considering the costs and benefits of both the implementation of precautionary approaches to public EMF exposure and also in the development of exposure guidelines.”

The Institute of Engineering and Technology's media release can be viewed at:

[WEB LINK >](#)

*continued next page ...*

[NEXT >](#)  
[BACK >](#)  
[HOME >](#)  
[PRINT >](#)  
[EXIT >](#)

## IN BRIEF

– continued from previous page



### **BULLYING IS CHIEF CONCERN SURROUNDING MOBILE PHONES**

People are more concerned about children being bullied or exposed to pornography through mobile phones than the health effects of using the devices, according to a survey for *The Times* newspaper in London.

The survey, conducted by market research company Populus, found almost 70 per cent of the 1051 respondents are 'very concerned' about children being bullied through their mobile phones, while only a quarter are 'very concerned' about potential health risks from using mobiles.

An article published in *The Times* newspaper can be viewed at:

[WEB LINK >](#)

When asked: what might stop you giving a child a mobile phone? – Almost 80 per cent of respondents said crime issues including bullying and theft, far more than any other issue.

Of the most concern to respondents was the issue of mobile phone use whilst driving, with 84 per cent of the people surveyed 'very concerned' about the problem.

Results from the Populus Concerned Consumer Summary for May 2008 are available at:

[WEB LINK >](#)

[HOME >](#)  
[BACK >](#)  
[PRINT >](#)  
[EXIT >](#)