

**AAP Headquarters**

141 Northwest Point Blvd  
Elk Grove Village, IL 60007-1019  
Phone: 847/434-4000  
Fax: 847/434-8000  
E-mail: kidsdocs@aap.org  
www.aap.org

**Reply to****Department of Federal Affairs**

Homer Building, Suite 400 N  
601 13th St NW  
Washington, DC 20005  
Phone: 202/347-8600  
Fax: 202/393-6137  
E-mail: kids1st@aap.org

**Executive Committee****President**

Thomas K. McInerney, MD, FAAP

**President-Elect**

James M. Perrin, MD, FAAP

**Immediate Past President**

Robert W. Block, MD, FAAP

**Executive Director/CEO**

Errol R. Alden, MD, FAAP

**Board of Directors****District I**

Carole E. Allen, MD, FAAP  
Arlington, MA

**District II**

Danielle Laraque, MD, FAAP  
Brooklyn, NY

**District III**

David I. Bromberg, MD, FAAP  
Frederick, MD

**District IV**

Francis E. Rushton, Jr, MD, FAAP  
Beaufort, SC

**District V**

Marilyn J. Bull, MD, FAAP  
Indianapolis, IN

**District VI**

Pamela K. Shaw, MD, FAAP  
Kansas City, KS

**District VII**

Kenneth E. Matthews, MD, FAAP  
College Station, TX

**District VIII**

Kyle Yasuda, MD, FAAP  
Seattle, WA

**District IX**

Stuart A. Cohen, MD, MPH, FAAP  
San Diego, CA

**District X**

Sara H. Goza, MD, FAAP  
Fayetteville, GA

December 12, 2012

The Honorable Dennis Kucinich  
2445 Rayburn House Office Building  
Washington, DC 20515

Dear Representative Kucinich:

On behalf of the American Academy of Pediatrics (AAP), a non-profit professional organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents, and young adults, I would like to share our support of H.R. 6358, the *Cell Phone Right to Know Act*.

The AAP strongly supports H.R. 6358's emphasis on examining the effects of radiofrequency (RF) energy on vulnerable populations, including children and pregnant women. In addition, we are pleased that the bill would require the consideration of those effects when developing maximum exposure standards. Children are disproportionately affected by environmental exposures, including cell phone radiation. The differences in bone density and the amount of fluid in a child's brain compared to an adult's brain could allow children to absorb greater quantities of RF energy deeper into their brains than adults. It is essential that any new standards for cell phones or other wireless devices be based on protecting the youngest and most vulnerable populations to ensure they are safeguarded through their lifetimes.

In addition, the AAP supports the product labeling requirements in H.R. 6358. These standards will ensure consumers can make informed choices in selecting mobile phone purchases. They will also enable parents to better understand the potential dangers of RF energy exposure and protect their children.

On July 24, the U.S. Government Accountability Office (GAO) published a report on federal cell phone radiation exposure limits and testing requirements. The GAO noted that the Federal Communications Commission's (FCC) most recent data indicates that the number of estimated mobile phone subscribers has grown from approximately 3.5 million in 1989 to approximately 289 million at the end of 2009. Cell phone use behaviors have also changed during that time. The quantity and duration of cell phone calls has increased, as has the amount of time people use mobile phones, while cell phone and wireless technology has undergone substantial changes. Many more people, especially adolescents and young adults, now use cell phones as their only phone line, and they begin using wireless phones at much younger ages.

Despite these dramatic changes in mobile phone technology and behavior, the FCC has not revisited the standard for cell phone radiation exposure since 1996. The current FCC standard for maximum radiation exposure levels is based on the heat emitted by mobile phones. These guidelines specify exposure limits for hand-held wireless devices in terms of the Specific Absorption Rate (SAR), which measures the rate the body absorbs radiofrequency (RF). The current allowable SAR limit is 1.6 watts per kilogram (W/kg), as averaged over one gram of tissue. Although wireless devices sold in the United States must ensure that they do not exceed the maximum allowable SAR limit when operating at the device's highest possible power level, concerns have been raised that long-term RF energy exposure at this level affects the brain and other tissues and may be connected to types of brain cancer, including glioma and meningioma.


In May 2011, the International Agency for Research on Cancer (IARC), the United Nations' World Health Organization's (WHO) agency promoting international cancer research collaboration, classified RF energy as "possibly carcinogenic to humans." In addition, the National Cancer Institute has stated that although studies have not definitively linked RF energy exposure from cell phones to cancer, more research is required to address rapidly changing cell phone technology and use patterns.

This and other research identified by the GAO demonstrates the need for further research on this issue, and makes clear that exposure standards should be reexamined.

The GAO concluded that the current exposure limits may not reflect the latest research on RF energy, and that current mobile phone testing requirements may not identify maximum RF energy exposure. The GAO proposed that the FCC formally reassess its limit and testing requirements to determine whether they are effective. The AAP commends the activities proposed under H.R. 6358, as they would address this research gap and improve consumer knowledge and safety. Establishing an expanded federal research program as the basis for exposure standards will ensure that consumer protections incorporate the latest research. Currently, the National Institute of Health (NIH), the only federal agency the GAO identified as directly funding research on this topic, provided approximately \$35 million from 2001 to 2011. Given this previous funding level, the AAP supports the \$50 million per fiscal year for seven years that H.R. 6358 would authorize.

The AAP appreciates your recognition of the need for new research and standards for mobile phone radiation, and is pleased to support H.R. 6358. For further assistance, please do not hesitate to contact Sonya Clay, Assistant Director, Department of Federal Affairs, at 202-347-8600 or [sclay@aap.org](mailto:sclay@aap.org).

Sincerely,

A handwritten signature in black ink that reads "Thomas K. McInerney". The signature is written in a cursive style with a large, stylized "T" and "M".

Thomas K. McInerney, MD, FAAP  
President



## AAP Headquarters

141 Northwest Point Blvd  
Elk Grove Village, IL 60007-1019  
Phone: 847/434-4000  
Fax: 847/434-8000  
E-mail: kidsdocs@aap.org  
www.aap.org

## Reply to

### Department of Federal Affairs

Homer Building, Suite 400 N  
601 13th St NW  
Washington, DC 20005  
Phone: 202/347-8600  
Fax: 202/393-6137  
E-mail: kids1st@aap.org

## Executive Committee

### President

Thomas K. McInerney, MD, FAAP

### President-Elect

James M. Perrin, MD, FAAP

### Immediate Past President

Robert W. Block, MD, FAAP

### Executive Director/CEO

Errol R. Alden, MD, FAAP

## Board of Directors

### District I

Carole E. Allen, MD, FAAP  
Arlington, MA

### District II

Danielle Laraque, MD, FAAP  
Brooklyn, NY

### District III

David I. Bromberg, MD, FAAP  
Frederick, MD

### District IV

Francis E. Rushton, Jr, MD, FAAP  
Beaufort, SC

### District V

Marilyn J. Bull, MD, FAAP  
Indianapolis, IN

### District VI

Pamela K. Shaw, MD, FAAP  
Kansas City, KS

### District VII

Kenneth E. Matthews, MD, FAAP  
College Station, TX

### District VIII

Kyle Yasuda, MD, FAAP  
Seattle, WA

### District IX

Stuart A. Cohen, MD, MPH, FAAP  
San Diego, CA

### District X

Sara H. Goza, MD, FAAP  
Fayetteville, GA

August 29, 2013

The Honorable Mignon L. Clyburn  
Acting Commissioner  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20054

The Honorable Dr. Margaret A. Hamburg  
Commissioner  
U.S. Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

Dear Acting Chairwoman Clyburn and Commissioner Hamburg:

The American Academy of Pediatrics (AAP), a non-profit professional organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents, and young adults appreciates this opportunity to comment on the Proposed Rule “Reassessment of Exposure to Radiofrequency Electromagnetic Fields Limits and Policies” published in the Federal Register on June 4, 2013.

In the past few years, a number of American and international health and scientific bodies have contributed to the debate over cell phone radiation and its possible link to cancer. The International Agency for Research on Cancer (IARC), part of the United Nations’ World Health Organization, said in June 2011 that a family of frequencies that includes mobile-phone emissions is “possibly carcinogenic to humans.” The National Cancer Institute has stated that although studies have not demonstrated that RF energy from cell phones definitively causes cancer, more research is needed because cell phone technology and cell phone use are changing rapidly. These studies and others clearly demonstrate the need for further research into this area and highlight the importance of reassessing current policy to determine if it is adequately protective of human health.

As radiation standards are reassessed, the AAP urges the FCC to adopt radiation standards that:

- **Protect children’s health and well-being.** Children are not little adults and are disproportionately impacted by all environmental exposures, including cell phone radiation. Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children. It is essential that any new standard for cell phones or other wireless devices be based on

protecting the youngest and most vulnerable populations to ensure they are safeguarded throughout their lifetimes.

- **Reflect current use patterns.** The FCC has not assessed the standard for cell phone radiation since 1996. Approximately 44 million people had mobile phones when the standard was set; today, there are more than 300 million mobile phones in use in the United States. While the prevalence of wireless phones and other devices has skyrocketed, the behaviors around cell phone uses have changed as well. The number of mobile phone calls per day, the length of each call, and the amount of time people use mobile phones has increased, while cell phone and wireless technology has undergone substantial changes. Many children, adolescents and young adults, now use cell phones as their only phone line and they begin using wireless phones at much younger ages. Pregnant women may carry their phones for many hours per day in a pocket that keeps the phone close to their uterus. Children born today will experience a longer period of exposure to radio-frequency fields from cellular phone use than will adults, because they start using cellular phones at earlier ages and will have longer lifetime exposures. FCC regulations should reflect how people are using their phones today.
- **Provide meaningful consumer disclosure.** The FCC has noted that it does not provide consumers with sufficient information about the RF exposure profile of individual phones to allow consumers to make informed purchasing decisions. The current metric of RF exposure available to consumers, the Specific Absorption Rate, is not an accurate predictor of actual exposure. AAP is supportive of FCC developing standards that provide consumers with the information they need to make informed choices in selecting mobile phone purchases, and to help parents to better understand any potential risks for their children. To that end, we support the use of metrics that are specific to the exposure children will experience.

The AAP supports the reassessment of radiation standards for cell phones and other wireless products and the adoption of standards that are protective of children and reflect current use patterns. If you have questions, please contact Clara Filice in the AAP's Washington Office at 202/347-8600.

Sincerely,



Thomas K. McInerny, MD FAAP  
President

TKM/cf

**AAP Headquarters**

141 Northwest Point Blvd  
Elk Grove Village, IL 60007-1019  
Phone: 847/434-4000  
Fax: 847/434-8000  
E-mail: kidsdocs@aap.org  
www.aap.org

**Reply to****Department of Federal Affairs**

Homer Building, Suite 400 N  
601 13th St NW  
Washington, DC 20005  
Phone: 202/347-8600  
Fax: 202/393-6137  
E-mail: kids1st@aap.org

**Executive Committee****President**

Robert W. Block, MD, FAAP

**President-Elect**

Thomas K. McInerney, MD, FAAP

**Immediate Past President**

O. Marion Burton, MD, FAAP

**Executive Director/CEO**

Errol R. Alden, MD, FAAP

**Board of Directors****District I**

Carole E. Allen, MD, FAAP  
Arlington, MA

**District II**

Danielle Laraque, MD, FAAP  
Brooklyn, NY

**District III**

Sandra Gibson Hassink, MD, FAAP  
Wilmington, DE

**District IV**

Francis E. Rushton, Jr, MD, FAAP  
Beaufort, SC

**District V**

Marilyn J. Bull, MD, FAAP  
Indianapolis, IN

**District VI**

Michael V. Severson, MD, FAAP  
Shakopee, MN

**District VII**

Kenneth E. Matthews, MD, FAAP  
College Station, TX

**District VIII**

Kyle Yasuda, MD, FAAP  
Seattle, WA

**District IX**

Myles B. Abbott, MD, FAAP  
Berkeley, CA

**District X**

Sara H. Goza, MD, FAAP  
Fayetteville, GA

July 12, 2012

The Honorable Julius Genachowski  
Commissioner  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

Dear Chairman Genachowski:

The American Academy of Pediatrics (AAP), a non-profit professional organization of 60,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents, and young adults strongly supports the proposal for a formal inquiry into radiation standards for cell phones and other wireless products. The Academy encourages the Federal Communications Commission (FCC) to vote to move forward with this inquiry in an expeditious manner.

The FCC has not assessed the standard for cell phone radiation since 1996. According to industry groups, approximately 44 million people had mobile phones when the standard was set; today, there are more than 300 million mobile phones in use in the United States. While the prevalence of wireless phones and other devices has sky-rocketed, the behaviors around cell phone uses have changed as well. The number of mobile phone calls per day, the length of each cell phone call, and the amount of time people use mobile phones has increased, while cell phone and wireless technology has undergone substantial changes. Many more people, especially adolescents and young adults, now use cell phones as their only phone line and they begin using wireless phones at much younger ages.

The FCC standard for maximum radiation-exposure levels are based on the heat emitted by mobile phones. These guidelines specify exposure limits for hand-held wireless devices in terms of the Specific Absorption Rate (SAR), which measures the rate the body absorbs radiofrequency (RF). The current allowable SAR limit is 1.6 watts per kilogram (W/kg), as averaged over one gram of tissue. Although wireless devices sold in the United States must ensure that they do not exceed the maximum allowable SAR limit when operating at the device's highest possible power level, concerns have been raised that long-term RF exposure at this level affects the brain and other tissues and may be connected to types of brain cancer, including glioma and meningioma.

In the past few years, a number of American and international health and scientific bodies have contributed to the debate over cell phone radiation and its possible link to cancer. The International Agency for Research on Cancer (IARC), part of the

United Nations' World Health Organization, said in June 2011 that a family of frequencies that includes mobile-phone emissions is "possibly carcinogenic to humans." The National Cancer Institute has stated that although studies have not demonstrated that RF energy from cell phones definitively causes cancer, more research is needed because cell phone technology and cell phone use are changing rapidly. While a definitive link between cell phone radiation and brain cancer has not been established, these studies and others clearly demonstrate the need for further research into this area and highlight the importance of reassessing the current SAR to determine if it is protective of human health.

The AAP believes the inquiry to reassess the radiation standard presents an opportunity to review its impacts on children's health and well-being. In the past, such standards have generally been based on the impact of exposure on an adult male. Children, however, are not little adults and are disproportionately impacted by all environmental exposures, including cell phone radiation. In fact, according to IARC, when used by children, the average RF energy deposition is two times higher in the brain and 10 times higher in the bone marrow of the skull, compared with mobile phone use by adults. While the Academy appreciates that the FCC is considering investigating whether the emission standards should be different for devices primarily used by children, it is essential that any new standard for cell phones or other wireless devices be based on protecting the youngest and most vulnerable populations to ensure they are safeguarded throughout their lifetimes.

Finally, in reviewing the SAR standard, the FCC has the opportunity to highlight the importance of limiting media use among children. The Academy has found potentially negative effects and no known positive effects of media use by children under the age of two, including television, computers, cell phones, and other handheld wireless devices. In addition, studies consistently show that older children and adolescents utilize media at incredibly high rates, which potentially contributes to obesity and other health and developmental risks. In reviewing the SAR limit, the FCC has the opportunity to improve the health of our nation by highlighting the importance of limiting screen time and media use for children and adolescents.

The AAP supports the proposal for a formal inquiry into radiation standards for cell phones and other wireless products and the Academy encourages the FCC to vote in favor of moving forward with this investigation. If you have questions or concerns, please contact Kristen Mizzi in the AAP's Washington Office at 202/347-8600.

Sincerely,

A handwritten signature in black ink, appearing to read "R. W. Block". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert W. Block, MD FAAP  
President

RWB/km

# *Are You Pregnant?*

Protect Your Baby from Wireless Radiation!



Recent studies from Yale University show that exposure to wireless radiation can have profound effects on brain development, including symptoms of Attention Deficit/Hyperactivity Disorder (ADHD).

Now, doctors and researchers around the world are urging pregnant women to take simple steps to limit their exposure to wireless radiation.

For more information, including links to scientific studies and video interviews with medical doctors and public health experts, please visit our web site, **BabySafeProject.org**.

## *10 Tips for Reducing Your Exposure to Wireless Radiation*

1. Avoid carrying your cell phone on your body (e.g. in a pocket or bra).
2. Avoid holding any wireless device against your body when in use.
3. Use your cell phone on speaker setting or with an "air tube" headset.
4. Avoid using your wireless device in cars, trains or elevators.
5. Avoid cordless phones, especially where you sleep.
6. Whenever possible, connect to the internet with wired cables.
7. When using Wi-Fi, connect only to download, then disconnect and disable Wi-Fi.
8. Avoid prolonged or direct exposure to Wi-Fi routers.
9. Unplug your home Wi-Fi router when not in use (e.g. at bedtime).
10. Sleep as far away from wireless utility meters (i.e. "smart" meters) as possible



**The BabySafe Project**  
[www.BabySafeProject.org](http://www.BabySafeProject.org)  
**#KnowYourExposure**

What's Your  
Exposure?  
Take the Quiz!

