



# School Nurse Update

#8 12/04/18

LOUISE WILSON, MS, BSN, RN, NCSN

IN THIS ISSUE

Greetings!

This is a busy time of the year, both professionally and personally for school nurses. I included something a little different in this Update. It is a simple **reminder to eat a healthy breakfast**. As school nurses you do so much for others. Please **remember to set aside designated time for self-care activities**. For me, eating is self-care!

Periodically I get questions regarding fleas. Unfortunately, I do not have many resources to offer those who contact me. I therefore am happy to pass on a link to an **Environmental Protection Agency (EPA) webinar on fleas, to be held December 11, 2018 1:00-2:30 PM CST**:

<https://register.gotowebinar.com/register/7863614098043130115> The webinar is free. If you are not able to attend, the webinar is archived for later viewing.

On November 29<sup>th</sup> I listened to an EPA webinar, "Examining the Evidence: How School Buildings Influence Student Health, Thinking and Performance." Discussed was **why healthy school environments are important and how the school building itself impacts children's health and academic performance**. As noted, while we univesally measure test scores, attendance and graduation rates, no one measures the impact of too hot or cold classrooms, poor air exchange rates, lighting, or other physical issues with our school buildings. Children spent 90% of their time indoors and much of that time is spent in school. Unhealthy school environments can affect children's health, attendance, concentration and performance, as well as lead to expensive, time-consuming cleanup and remediation activities. [Read more...](#)

What is your experience with **telehealth**? I recently saw this news report on the NASN discussion list "[Hermosa's new school nurse is an iPad](#)." I would love to hear about **Wisconsin school nurse's experiences and thoughts on the use of telehealth for school health services**. Please email me your comments.

**YRBS Survey**

**Healthy Sleep Resources**

**Role of Pediatrician in Special Education**

**Breakfast Tips for School Nurses**

**Wisconsin EPI Express**

**Cell Phone Radio Frequency Radiation Studies**

**PRACTICE POINTS- Special Education and the Physician**

## SAVE THE DATE

**Moving Forward with Social Emotional Learning** - January 8, 2019 Stevens Point - Flyer attached

**Wisconsin Association of School Nurses Annual Conference** - April 8-10, 2019 Wisconsin Dells - Room block now open!



## DPI News

Youth Risk Behavior Survey: DPI has a new system for the Youth Risk Behavior Survey, including new software and standardized survey dates and versions. The improvements should streamline the YRBS process, improve the usefulness of local data, and reduce survey burden on schools. Going forward, the survey will only be offered every other spring (January to March 2019, 2021, etc.). Schools wishing to collect YRBS data during the spring 2019 window can register from October through March 15 to take the survey any time from January 7, 2019 through March 29, 2019. Schools are encouraged to collaborate with local health departments, CESAs, and other local stakeholders who can help coordinate local data collection efforts. Registration materials are available through the [Conducting A YRBS website](#). Schools who wish to retrieve their old YRBS data (meaning anything prior to the 2018-19 school year) from the outgoing system can find a link to the [old OYRBS system](#) on the same webpage, under the “Reports and Results” section. Schools wishing to retrieve old reports are encouraged to do so during the 2018-19 school year. After that point, the old system will be archived and it will be more difficult to retrieve such data.

Please remember that if your high school has been identified and contacted by DPI as a CDC/State of Wisconsin sample school, your participation is necessary to produce official Wisconsin statistics.

## Free Resources to Support Healthy Sleep for Children

Better sleep leads to better performance; in the classroom, on the field, and in life. The Alliance for a Healthier Generation and Sleep Number campaign, *Sleep Smarter. Perform Better.* is designed to raise awareness about the importance of improving child and youth sleep. Visit [HealthierGeneration.org/SmarterSleep](http://HealthierGeneration.org/SmarterSleep) to access free healthy sleep resources and fun activities for children of all ages. Together, we can help kids Sleep Smarter and Perform Better.



## The New Seizure Terminology: How to Classify and Describe a Seizure

Review the most current seizure terminology to help school nurses better understand the different types of seizures and the importance of standardized terminology around seizures. From Medscape Nurses: <https://wb.md/2r6Giqq>

## Articles of Interest to School Nurses from the American Academy of Pediatrics ([HealthyChildren.org](http://HealthyChildren.org))

[ADHD & Driving Risks: The Link Parents Need to Know](#)

[My child is receiving special education in school. What role should his pediatrician play?](#)

[What Makes Teen Acne Worse?](#)



Wisconsin’s 2018/19 influenza immunization rates (29%) remain far below the Healthy People 2020 goal of 70% coverage. The [Weekly Respiratory Report](#) for the week ending on November 17, 2018, is now available.

**Wisconsin Epi Express (WEE) Newsletter is Here!**

The WEE newsletter is a report on current communicable disease issues and program updates from the Bureau of Communicable Diseases (BCD). This newsletter is published quarterly and distributed electronically. Check out the [new issue!](#) For previous issues, please view the [Epi Express webpage](#)



**News from NASN...  
What You Need to Know About the Health Behaviors of High School Students**



There is a new educational activity from NASN that presents the 2017 Youth Risk Behavior Surveillance System (YRBSS) study and how to interpret what these trends mean for your practice.

The Center for Disease Control and Prevention's YRBSS is the nation's largest surveillance system designed to monitor health behaviors and experiences among high school students throughout the United States. It summarizes behaviors and experiences that place youth at risk for HIV, STD, and pregnancy, with common school-based protective factors (e.g., school connectedness, parent/guardian engagement), and includes information on high-risk substance use, violence victimization, mental health and suicide.

This 2017 Youth Risk Behavior Surveillance System Data and Results program includes information about ten year trends and sexual minority youth data. You can also earn 1 CNE hour by completing this online course.

**Wake Up to a Healthy Breakfast**

Starting your morning off with a nutritious and filling breakfast can set the tone for the rest of the day. If you find yourself consistently skipping breakfast, it may be time to try a new approach: meal prep. Meal prepping does not have to just include lunches and dinners. There are many great make-ahead breakfast options for hectic mornings. These recipes can be made ahead of time over the weekend to be enjoyed throughout the week:

- [Slow Cooker Steel Cut Oats](#)
- [Healthy Muffin Pan Quiche](#)
- [Fastest and Easiest Way to Cook Steel Cut Oats](#)
- [Banana Oat Muffins](#)



Photo by [Brooke Lark on Unsplash](#)

**Bonus tip:** Try portioning out plain nonfat Greek yogurt with fresh fruit in separate containers for an even quicker “grab and go” breakfast option that requires very minimal prep. Toss in some granola or nuts to make it even more filling, or here are few other [topping suggestions](#)

## Request for Assistance in Reaching Children/Adolescents with Food Allergies for Research Study

Katherine (Katy) Scott Sage is doctoral student in the Pediatric School Psychology program at East Carolina University. She graduated from UW and is externing at Children's Hospital of Wisconsin in Milwaukee with child psychologists.

Katy is conducting a longitudinal study focusing on children's food allergies and family functioning for her thesis and dissertation. The goal of this study is to improve the quality of life for children with food allergies and to examine the relationship between families' responses to children's food allergies and children's anxiety.

Katy is recruiting children between the ages of 8 and 18 who have one or more food allergies and their parents, to participate in the research study. The study consists of online surveys to be accessed by the participants without any personal information necessary to participate, unless they choose to be contacted again in the future. As this is a longitudinal study, parents who choose to provide their email address will be contacted. No further identifying information will be collected.

Attached to this Update are promotional flyers school nurses could use to help Katy recruit children and adolescent with food allergies to participate in this study. This study has been approved by an IRB board at East Carolina University, IRB# UMCIRB 15-000214.

If you have any further questions or would like a more detailed description of this study, please feel free to contact Katy at [scottka15@ecu.edu](mailto:scottka15@ecu.edu)(252)328-5826 or her faculty supervisor, Dr. Christy Walcott, at [walcottc@ecu.edu](mailto:walcottc@ecu.edu) (252)328-1378.



Safe Schools, Safe Communities (SSSC19) will feature a variety of speakers and workshops facilitated by local and regional experts. Conference participants will gain critical skills, tools, knowledge, and connections to help lead and support efforts to create more inclusive environments for lesbian, gay, bisexual, pansexual, transgender, nonbinary, queer, and questioning youth across Wisconsin.

Our target audience includes adults who work with you and their families as well as youth delegates from middle school and high school-age groups or clubs in schools or in the community. *School and community-based youth groups and clubs are invited to designate and register up to two youth delegates to attend SSSC19.*

[Register Here](#)

There are a limited number of full and partial scholarships available to individuals wishing to attend SSSC19. If you are in need of a scholarship, would prefer to register offline, need to be invoiced, or have additional questions please contact Brian J. at (608) 661-4141 or email [brianj@gsafewi.org](mailto:brianj@gsafewi.org).

Since I included a link to an article from the American Academy of Pediatrics giving their perspective of the pediatrician's role in special education, I felt it important to share the Department of Public Instruction's (DPI) guidance on this issue. The following is primarily a synopsis of a July 2014 DPI memo. Additional information regarding HIPAA and FERPA concludes the Practice Points.

The federal Individuals with Disabilities Education Act (IDEA) and Wisconsin special education law (Chapter 115) entitles children with disabilities age 3-21 enrolled in public schools to special education and related services designed to meet their disability related needs. "Disability" in the context of special education means the existence of a physical, mental, or emotional impairment combined with a need for special educational services. A physician plays an important role in the identification of students with disabilities, and may provide valuable insight into a student's disability-related needs; however, a child's need for special education is not derived from a medical diagnosis, and special education and related services are not "prescribed."

A physician who reasonably believes a child has a disability must refer the child to a school district for evaluation ([Wis. Stat. §115.777](#)). The referral must be in writing and include the name of the child and the reason why the physician believes the child has a disability. The physician must inform the child's parent of the intent to refer prior to submitting the referral document. The referral should be submitted to the school district where the child is enrolled.

Upon receipt of a referral the school district will assemble an individualized education program (IEP) team to determine whether the child is eligible for special education and related services. Only the IEP team can make such determinations. The child's physician is not a required member of the IEP team, but may participate on the IEP team with the consent of the child's parents. The IEP team may consider information provided by a physician regarding a child's disability regardless of the physician's attendance at an IEP team meeting.

On determination of a need for special educational services, the IEP team will develop an IEP for the child. The IEP specifies the special education and related services necessary for the child to receive a free appropriate public education (FAPE). The IEP will be reviewed and revised at least annually by the IEP team. As with the evaluation process, physicians may participate as IEP team members, and the IEP team may consider information provided by physicians when determining what special education and related services a particular child may require.

IEP teams may provide for physical therapy, occupational therapy, counseling services, school health services, or school nurse services, if the team determines such services are necessary for the child to benefit from special education. On occasion, an IEP team may provide for the services of a licensed physician, but only when such services are required to determine a child's medically related disability.

The confidentiality of information contained in school records is protected by federal and state law. Schools will require written consent from a child's parents prior to releasing any information from a child's record to the child's physician or permitting a physician to attend an IEP team meeting.

In November 2008 the U. S. Department of Health and Human Services and the U. S. Department of Education issued [joint guidance on the application of FERPA and HIPAA](#) to student health records. In the guidance it states that the HIPAA Privacy Rule *allows covered health care providers to disclose personally identifiable information about students to school nurses, physicians, or other health care providers for treatment purposes, without the authorization of the student or student's parent. For example, a student's primary care physician may discuss the student's medication and other health care needs with a school nurse who will administer the student's medication and provide care to the student while the student is at school.*

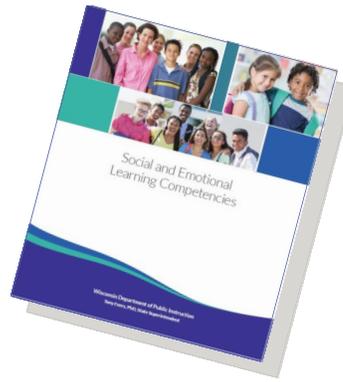
What that means for IEP teams and special education evaluations is that written consent to exchange student health and academic information is required when performing the evaluation. Once the student starts receiving (health) services (under an IEP) school nurses may consult with non-school based health care providers if both are involved in the treatment or care of the student. While not required, it is preferable to have written parental (or adult student) consent. FERPA governs the exchange of student health information among staff within the school setting.

For a complete discussion of [student records and confidentiality](#) please see the DPI's bulletin.

School Nurse Webpage: <https://dpi.wi.gov/state/build-services/school-nurse>

To join the School Nurse Email List and receive school nursing updates and information send an email to [join-schoolnurse@lists.dpi.wi.gov](mailto:join-schoolnurse@lists.dpi.wi.gov)





## Moving Forward with Social Emotional Learning

**January 8, 2019**

**9:00 am-3:00 pm**

**Registration 8:30 am-9:00 am**

**Holiday Inn-Stevens Point Convention Center**

**1001 Amber Avenue**

**Stevens Point, WI 54482**

**Contact:** Lynn Verage, CESA #9 (715) 453-2141 Ext. 228

[lverage@cesa9.org](mailto:lverage@cesa9.org)

Making social and emotional learning (SEL) skills part of the learning equation helps children succeed in school and life. With social and emotional skills, children can manage their feelings, build healthy relationships, and navigate social environments. When adults are supported by good policies and training, children develop the skills needed to prepare them for the world.

In May of 2018, the Wisconsin Department of Public Instruction released the final draft of the long anticipated [Wisconsin Social Emotional Learning \(SEL\) Competencies](#).

Now that the competencies are finalized, districts have been asking for assistance in figuring the next steps in implementing these competencies. Therefore, we have developed this workshop to give district teams the opportunity to unpack the competencies.

**Presenter:**

Beth A. Herman, MSE

School Mental Health Training Consultant

Wisconsin Department of Public Instruction

**Participants will:**

- Map what is currently being done in their building or district to teach the competencies
- Conduct a gap analysis between the competencies and what is currently being taught
- Create a plan for filling in the gaps
- Figure out how to assess if students have mastered the competencies
- See how some school districts in our state are implementing Social Emotional Learning

**Cost:** \$25.00 (Includes lunch and snacks)

**ONLINE REGISTRATION:**

**Stevens Point - January 8, 2019**

<https://login.myquickreg.com/register/event/event.cfm?eventid=22412>

**Registration Questions:**

Mary Devine; (608) 786-4800 [mdevine@cesa4.org](mailto:mdevine@cesa4.org)

**Send payment to:**

CESA #4, 923 East Garland Street

West Salem, WI 54669 **ATTN:** Mary Devine

**PLEASE include and clearly define: Participant name, exact name of workshop, and date, with all checks or purchase orders. Thank you!**





**HAVE A FOOD ALLERGY?  
ARE YOU 12-19 YEARS OLD?  
HAVE ACCESS TO THE INTERNET?**

*RESEARCH STUDY: SELF-REGULATION IN ADOLESCENTS WITH FOOD ALLERGIES*

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**IF YOU ARE INTERESTED  
IN PARTICIPATING:**

**Go to:**

**<http://goo.gl/wgGZSu>**

PARTICIPATION DATES: SPRING 2018-SUMMER 2019

IN THIS STUDY YOU/ YOUR CHILD WILL:  
Complete a 15-25 minute survey

IF YOU HAVE ANY QUESTIONS,  
CONTACT KATY SCOTT SAGE AT:  
scottka15@ecu.edu

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## Cell Phone Radio Frequency Radiation Studies

Cell phones are used by 95% of American adults.<sup>1</sup> Given the large number of users, any harmful effects associated with cell phone use could be a significant public health concern.

Cell phones use radio frequency radiation (RFR) to transmit signals. The U.S. Food and Drug Administration (FDA) nominated RFR for study by the National Toxicology Program (NTP), due to widespread human exposure and limited information about the potential health effects of long-term use of cell phones.

### What did NTP study?

NTP conducted toxicology studies in rats and mice to help clarify potential health hazards, including cancer risk, from exposure to RFR used in 2G and 3G cell phones. 2G and 3G networks were standard when the studies were designed and are still used for phone calls and texting.

The \$30 million NTP studies took more than 10 years to complete and are the most comprehensive assessment, to date, of health effects in animals exposed to RFR. The results will help guide other studies of newer technologies.



### What did the studies find?

NTP studies found that exposure to high levels of RFR, like that used in 2G and 3G cell phones, was associated with:

- **Clear evidence of tumors in the hearts of male rats.** The tumors were malignant schwannomas.
- **Some evidence of tumors in the brains of male rats.** The tumors were malignant gliomas.
- **Some evidence of tumors in the adrenal glands of male rats.** The tumors were pheochromocytomas.

For female rats, and male and female mice, it was unclear, also known as equivocal, whether cancers observed in the studies were associated with exposure to RFR.

The conclusions were based on the NTP four categories of evidence that a substance may cause cancer.

- Clear evidence (highest)
- Some evidence
- Equivocal evidence
- No evidence (lowest)

*If you are concerned about potential health risks from RFR, the FDA suggests the following tips:<sup>2</sup>*

- Use speaker mode or a headset to place more distance between your head and the cell phone.
- Reduce the amount of time spent using your cell phone.





### Do the rat and mouse findings apply to humans?

The findings in animals cannot be directly applied to humans for two key reasons:

- The exposure levels and durations were greater than what people may receive from cell phones.
- The rats and mice received RFR across their whole bodies, which is different from the more localized exposures humans may receive, like from a cell phone in their pocket or next to their head.

However, the studies question the long-held assumption that radio frequency radiation is of no concern as long as the energy level is low and does not significantly heat the tissues.

### Did NTP find health effects other than cancer?

NTP found lower body weights among newborn rats and their mothers, especially when exposed to high levels of RFR during pregnancy and lactation, yet these animals grew to normal size.

### What factors contributed to the NTP conclusions?

In addition to seeing tumors in the male rats with higher exposures to RFR, NTP scientists also observed other changes in the hearts of exposed male and female rats that supported their conclusions.

The evidence for tumors in the brain and adrenal glands was not as strong as what NTP scientists saw in the heart. However, the type of brain cancer observed is similar to a type of brain tumor linked to heavy cell phone use in some human studies.<sup>3</sup>

Still, the effects observed in the animals were relatively rare. NTP scientists are not sure why male rats appear to be at greater risk for developing tumors compared to female rats.

### How do the RFR levels used in the studies compare to typical human exposures?

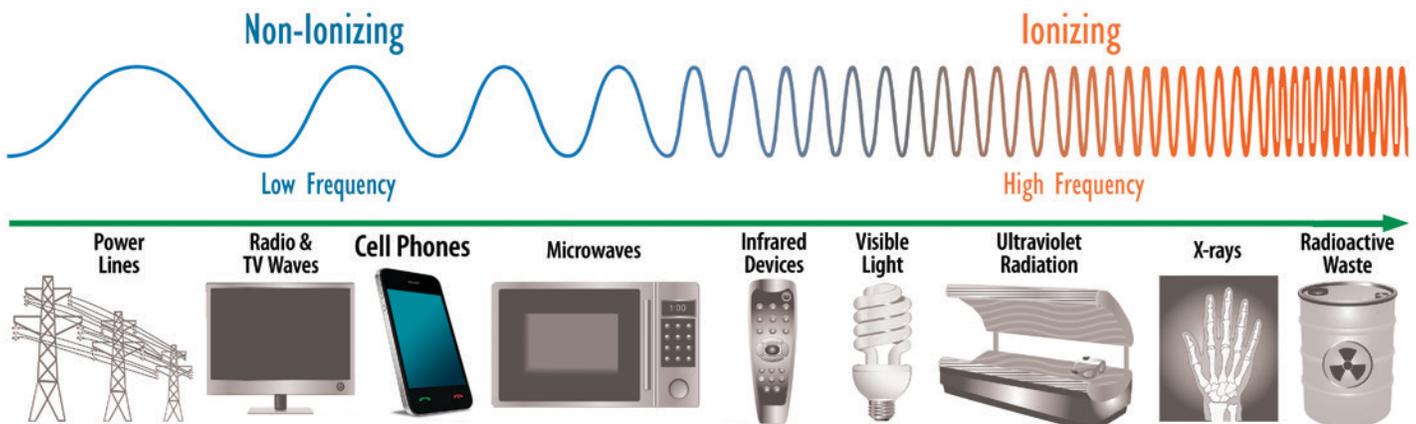
The lowest exposure level used in the studies was equal to the maximum local tissue exposure currently allowed for cell phone users. This power level rarely occurs with typical cell phone use. The highest exposure level in the studies was four times higher than the maximum power level permitted for local tissues.



### Why did NTP expose the animals' whole bodies to RFR?

Although many previous studies focused on exposure to the brain, NTP scientists wanted to make sure that they were considering health effects to the whole body, especially since many people do not hold their phones next to their head much of time.

## Electromagnetic Spectrum



RFR used in cell phones is at the lower frequency and lower energy end of the electromagnetic spectrum.



## What is the difference between electric and magnetic fields and RFR?

RFR is a subcategory of electric and magnetic fields (EMF), which are the invisible waves of force that surround any electrical device. The different types of EMF are distinguished by their frequencies. RFR is a form of low frequency, non-ionizing radiation that was thought to be relatively harmless.

## How were the studies conducted?

Rats and mice were exposed to RFR in special chambers for up to two years, or most of their natural lives. NTP scientists looked for a range of cancers and noncancer health effects.

Exposure to RFR began in the womb for rats and at 5-6 weeks old for mice. The RFR exposure was intermittent, 10 minutes on and 10 minutes off, totaling about 9 hours each day. The RFR levels ranged from 1.5 to 6 watts per kilogram of body weight in rats, and 2.5 to 10 watts per kilogram in mice.

The chambers were shielded rooms with a transmitting antenna that radiated RFR fields, plus rotating stirrers that generated a uniform field.<sup>4,5</sup> Pilot studies established field strengths that did not raise animal body temperatures excessively.<sup>6</sup>

The rats and mice were exposed to whole body RFR at frequencies of 900 and 1900 megahertz, respectively, from two technologies – Code Division Multiple Access (CDMA) and Global System for Mobile Communications (GSM).

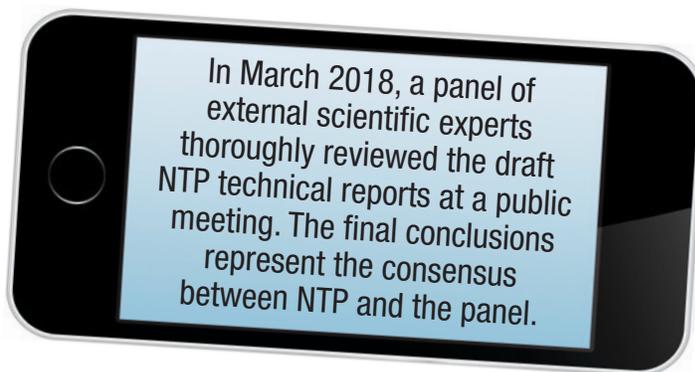
NTP and RFR experts from the National Institute of Standards and Technology (NIST) and the IT'IS Foundation designed and built the chambers specifically for these studies.



Chambers at the IIT Research Institute in Chicago where the studies took place

## What is the difference between CDMA and GSM?

CDMA and GSM are two common ways of transmitting cell phone signals in the U.S. and Europe. There are substantial differences in signal structure that may result in different RFR exposures, so NTP wanted to expose the animals to both modulations.



## How do the NTP studies relate to 4G, 5G, or Wi-Fi?

NTP studies of RFR used in 2G and 3G cell phones do not apply to 4G or 5G technologies. These newer technologies use different methods of signal modulation than NTP used in the studies. The NTP studies also did not investigate frequencies and modulations used for Wi-Fi.

## What were the studies' strengths?

NTP was able to control exactly how much RFR the animals received — something that is not possible when studying human cell phone use.

## Were there any surprise findings?

NTP found longer lifespans among the exposed male rats. This may be explained by an observed decrease in chronic kidney problems that are often the cause of death in older rats.

## What will NTP do with the results of the studies?

NTP will provide these studies to the FDA and Federal Communications Commission. The agencies will review the information as they continue to monitor new research on the potential health effects of RFR.

*Final reports and data tables are available on the NTP website at <https://ntp.niehs.nih.gov/go/cellphone>.*

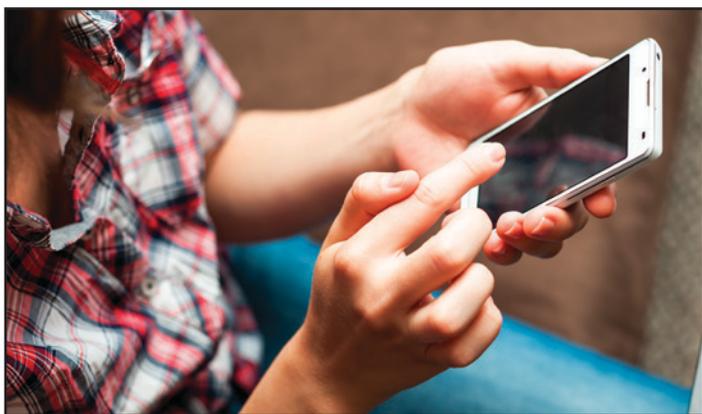


## Are future studies planned?

NTP is collaborating with NIST and IT'IS to develop smaller RFR exposure chambers for additional short-term studies that will take weeks and months rather than years. These studies will focus on further clarifying what NTP learned in the long-term studies and investigating the possibility of DNA damage in exposed tissues.

The exposure system is also being designed so studies of different RFR frequencies and modulations can keep up with the changing technologies in the telecommunications industry.

NTP is also hoping to identify biomarkers of damage from RFR exposure. These would be measurable physical changes that can be seen in shorter periods of time than it takes to develop cancer. Examples could be changes in heart rate after exposure or molecular changes that might be predictive of cancer. If scientists can better understand biological changes in animals, they will know more about what to look for in humans.



## Where can I go for more information?

For more information on what federal agencies are doing to determine whether RFR used in cell phones may affect human health, visit the following websites:

### National Toxicology Program

<https://ntp.niehs.nih.gov/go/cellphone>

### National Cancer Institute

[www.cancer.gov/about-cancer/causes-prevention/risk/radiation/cell-phones-fact-sheet](http://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/cell-phones-fact-sheet)

### U.S. Food and Drug Administration

<https://go.usa.gov/B5tx>

### Federal Communications Commission

[www.fcc.gov/consumers/guides/wireless-devices-and-health-concerns](http://www.fcc.gov/consumers/guides/wireless-devices-and-health-concerns)

The National Toxicology Program is an interagency program headquartered at the **National Institute of Environmental Health Sciences** that tests and evaluates chemicals in our environment.

For more information on NTP, go to <https://ntp.niehs.nih.gov>.

<sup>1</sup> Pew Research Center. 2018. Mobile Fact Sheet. Available: [www.pewinternet.org/fact-sheet/mobile](http://www.pewinternet.org/fact-sheet/mobile) [accessed 24 October 2018].

<sup>2</sup> FDA (U.S. Food and Drug Administration). 2017. Reducing Exposure: Hands-free Kits and Other Accessories. Available: <https://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/ucm116293.htm> [accessed 30 October 2018].

<sup>3</sup> IARC (International Agency for Research on Cancer). 2013. *Non-Ionizing Radiation, Part 2: Radiofrequency Electromagnetic Fields*. IARC Monogr Eval Carcinog Risks Hum 102:1-481.

<sup>4</sup> Capstick MH, Kuehn S, Berdinas-Torres V, Gong Y, Wilson PF, Ladbury JM, Koepke G, McCormick DL, Gauger J, Melnick RL, Kuster N. 2017. A radio frequency radiation exposure system for rodents based on reverberation chambers. *IEEE T Electromagn C* 59(4):1041-1052.

<sup>5</sup> Gong Y, Capstick MH, Kuehn S, Wilson PF, Ladbury JM, Koepke G, McCormick DL, Melnick RL, Kuster N. 2017. Life-time dosimetric assessment for mice and rats exposed in reverberation chambers for the two-year NTP cancer bioassay study on cell phone radiation. *IEEE T Electromagn C* 59(6):1798-1808.

<sup>6</sup> Wyde ME, Horn TL, Capstick MH, Ladbury JM, Koepke G, Wilson PF, Kissling GE, Stout MD, Kuster N, Melnick RL, Gauger J, Bucher JR, McCormick DL. 2018. Effect of cell phone radiofrequency radiation on body temperature in rodents: Pilot studies of the National Toxicology Program's reverberation chamber exposure system. *Bioelectromagnetics* 39(3):190-199.