

WASHINGTON STATE MEDICAL HOME PARTNERSHIPS PROJECT

CHILD HEALTH NOTES - January 2018

Promoting early identification and partnerships between families, primary health care providers & the community.

Contributors: the University of Washington, Center on Human Development & Disability (CHDD) & the Washington State Department of Health (DOH). Issue author: Sophie Lu, MN, ARNP, Developmental Pediatric Nurse Practitioner, UW CHDD. Reviewer: Jay Martini, PhD, NCSP, BCBA, UW Postdoctoral Fellow.

UBIQUITOUS SCREENS: RECOMMENDATIONS ON MEDIA USE FOR INFANTS, CHILDREN, AND ADOLESCENTS

Technological advancements have enabled most households to own multiple devices with screens--cell phones, tablets, computers, and televisions. The effects of media devices on the developing brain are not yet fully understood and are being investigated. In an ongoing study conducted by the National Institutes of Health on children in the United States, initial data examining brain MRIs of 4,500 participants revealed that 9- and 10- year old children who spend more than 7 hours a day on smartphones, tablets, or playing video games show signs of premature thinning of the cortex.ⁱ



The American Academy of Pediatrics (AAP) updated their recommendations on media use in the pediatric population in November 2016. They are summarized as followsⁱⁱ:

- For children **under 18 months**: Avoid media use, except for video chatting.
- For children **18 to 24 months**: If parents would like to introduce digital devices, advise them to choose high-quality programming and use media together with their child. Solo media use in this age group should be avoided.
- For children **2 to 5 years**: Limit screen time to 1 hour per day of high-quality programming with shared use between parent and child to promote enhanced learning, greater interaction, and limit setting.
- For **school aged children and adolescents**ⁱⁱⁱ: There are no specific AAP recommendations on the amount of screen time. The American Heart Association (AHA) recommends a 2 hour limit on screen time for this age group.^{iv}
- The AAP advises primary care providers (PCPs) to work with patients and families to understand the benefits and risks of media, to encourage adequate physical activity and sleep, to be aware of cyber bullying, sexting, problematic internet use, and internet gaming disorder, and to advocate for information and training in media literacy.
- Generally, the AAP recommends no screens during meals and 1 hour prior bedtime.

What Are the Potential Benefits of Digital Media Use?

- **Connection**: Video chatting can help keep families and friends connected even when they are geographically separated.
- **Health and Wellness**: Mobile devices allow for delivery of personalized health messages (via text or an app) that can help a child or teen combat obesity or monitor mood. It can also offer the ability to access support networks which may be especially helpful for children and teens with chronic illnesses or disabilities.
- **Prosocial Behavior**: Children can learn prosocial skills (i.e. sharing, taking turns, etc.) by watching quality programs such as Sesame Street and Mr. Rogers' Neighborhood.

Why is Screen Time and Media Use Concerning?

- **Mental Health**: Research shows that individuals who engage in heavy use of mobile devices often are more likely to feel stressed, depressed and have trouble sleeping.^v
- **Attention Problems**: Observational studies in humans have linked exposure to fast-paced television in the first 3 years of life with subsequent attentional deficits in later childhood.^{vi}
- **Obesity**: Research suggests the correlations between watching television and weight gain is due to several factors: children are sedentary when watching TV, they tend to eat more while they watch TV and the foods that are advertised to children are usually unhealthy.^{vii}
- **Physical Health Concerns**: Heavy users of mobile devices may find themselves making repetitive hand motions which can lead to hand and arm pain.
- **Cyberbullying**: Text messages and other mobile apps are increasingly used to send hurtful messages and pictures to victims.
- **Distracted Driving**: According to a 2013 report from the United States Department of Transportation, 330 people died in crashes involving a teen (15-19 years old) driver who was distracted by a cell phone.

- **Privacy:** Children and teens may not understand that any content placed in a shared space (even if they limit who can view the content) can easily be reposted, retweeted, re-pinned, etc. and subsequently viewed by an unintended party.
- **Sexual Predators:** In one study of internet sex crimes, researchers found that predators used social networking sites to contact youth, learn more about them, contact their friends, and distribute information or photos of the youth.^{viii}
- **Exposure:** Children may be exposed to violence, sexuality and portrayals of alcohol and other substance use.

What Can Parents Do?

- Decide what counts and what doesn't. Some families don't limit emails to extended family or doing homework, for example, but do track time on social network sites, watching online videos, or playing video games.
- Set a screen time budget, including TVs, tablets, phones, video game consoles, and computers.
- Be your child's media mentor and make content meaningful.
 - For example, children under 3 years old have difficulty transferring things they learn in 2D from screens to 3D. If a child plays a tablet game that allows the child to move a ball by dragging his or her fingers across the screen, the parent can make it more meaningful by playing with a real ball afterwards so the child can see it roll and bounce.
- Lead by example: examine how much each parent uses media and adjust according to the example you would like to set.
- Keep all screens out of the bedroom (including phones and tablets). Place all TVs, computers and video game consoles in family areas. It is harder monitor the content of what children are watching or playing, as well the time spent, when they are in their bedrooms.
- View programs and discuss the content with children:
 - Is this real or pretend?
 - Use controversial programming to initiate discussions about family values, violence, sexuality, and drugs.

Bottom Line:

- Children learn best when they are exposed to quality content with high parental engagement.

REFERENCES

- ⁱ CBS News 60 minutes. Groundbreaking study examines effects of screen time on kids. <https://www.cbsnews.com/news/groundbreaking-study-examines-effects-of-screen-time-on-kids-60-minutes/>
- ⁱⁱ Media and Young Minds. (2016). Pediatrics, 138(5), 1–8. <https://doi.org/10.1542/peds.2016-2591>
- ⁱⁱⁱ Media Use in School-Aged Children and Adolescents. (2016). Pediatrics, 138(5), 1–6. <https://doi.org/10.1542/peds.2016-2592>
- ^{iv} CBS This Morning. 2 hours of screen time a day for kids? https://www.cbs.com/shows/cbs_this_morning/video/yvMBnLmBbvZWGmGUKPrS6yT9TvU8HSHs/max-of-2-hours-of-screen-time-a-day-recommended-for-kids/
- ^v Boston Children's Hospital's Center on Media & Child Health. Mobile Devices. <http://cmch.tv/parents/mobile-devices/>
- ^{vi} Christakis, D. A., Ramirez, J., Ferguson, S. M., Ravinder, S., & Ramirez, J. M. (2018). How early media exposure may affect cognitive function: A review of results from observations in humans and experiments in mice. Proceedings of the National Academy of Sciences of the United States of America, 115(40), 9851-9858.
- ^{vii} Boston Children's Hospital's Center on Media & Child Health. Television and Movies. <http://cmch.tv/parents/television-and-movies/>
- ^{viii} Boston Children's Hospital's Center on Media & Child Health. Social Media. <http://cmch.tv/parents/social-media/>

SCREEN TIME RESOURCES

- Zerotothree.org Screen Sense** [What the Research Says About the Impact of Media on Children Aged 0-3 Years Old](#) Summary of current research and gives evidence based recommendations for families.
- Boston Children's Hospital Center on Media & Child Health** Extensive information and advice by age groups or media type.
- PBS Children and Media** Site with advice on TV, movies, computer use, video games & ads.
- Healthychildren.org Media** Audio & written discussions on media related topics from the AAP.
- AAP Media and Children Communication Toolkit** Resources for providers and families including articles, videos, sample social media messages and links (some in Spanish.)
- AAP Family Media Plan** Online tool where families can build media plans through this website. [Also in Spanish.](#)
- AAP Selecting Appropriate Toys for Young Children in the Digital Era** Guidance on selecting age appropriate toys.
- American Psychological Association Digital Guidelines: Promoting Healthy Technology Use for Children** Guidance for families.
- American Heart Association Limit Screen Time and Get Your Kids (and the Whole Family) Moving** Guidance for families.

SPECIAL NEEDS INFORMATION AND RESOURCES

Regional:	WithinReach Family Health Hotline	1-800-322-2588, 1-800-833-6388 TTD http://www.parenthelp123.org/ Spanish: http://www.parenthelp123.org/es/
	Early Support for Infants and Toddlers Program	1-360-725-3500 https://www.dcyf.wa.gov/services/child-development-supports/esit
	Parent to Parent Support Programs of Washington	1-800-821-5927 https://arcwa.org/index.php/getsupport/parent_to_parent_p2p_programs