

**'Eye-gonomics' and you**

**Excessive use of digital devices can have long-term impacts on eye health**

By Lyn Poll, M.S., SIA Prevention Services

Americans are inundated with digital devices. From the moment we get up to the time we go to bed, we're using an array of Smart phones, tablets, computers, laptops, TVs and other electronic devices. According to The Vision Council (2014), almost a third of adults spend most of their waking hours in the digital world and nearly three in 10 adults are considered high users, spending more than nine hours each day using digital devices. Yet, most users fail to notice how the time spent with technology is impacting the health of their vision, both immediately and over a lifetime.



Digital eyestrain, for example, is “the physical discomfort felt after two or more hours in front of a digital screen.” While no one culprit is responsible for technological eyestrain, exposure to blue light or high-energy visible light (HEV) emitted from screens has been shown to create visual impairments among all age groups. Because HEV light reaches deeper than ultraviolet light into the eye, studies are beginning to suggest that long-term exposure may damage the retina.

The retina is responsible for processing light and color and cannot regenerate or be replaced if damaged. Once retinal damage occurs, eyes are at an even higher risk for long-term visual impairment, such as cataracts, age-related macular degeneration and dry eye disease. In children, optometrists are seeing an increase in myopia or nearsightedness.

According to the Vision Council’s report “Hindsight is 20/20/20”, fewer than 25 percent of adults know anything about problems associated with blue light. They are more likely to seek care for “general” visual discomfort, such as

**Common Digital Device Overexposure Symptoms**

- **Eyestrain 32.8%**
- **Neck/shoulder/back pain 32.6%**
- **Headache 24%**
- **Blurred vision 23.3%**
- **Dry eyes 22.8%**

tired eyes, blurred vision or headaches. However, back, neck and shoulder pain are just as common when it comes to symptoms related to digital usage. Tools are available to help technology-users alleviate digital eyestrain and maintain visual health while preventing further eye discomfort. Using practical health tips and computer eyewear can help reduce short-term and potential long-term risks associated with digital eyestrain.

The Vision Council provides the following simple, less-expensive solutions for helping to reduce digital eye strain:

- **Use devices responsibly**
  - ◇ Keep hand-held devices at a safe distance and just below eye level.
  - ◇ Take a 20-20-20 break: Every 20 minutes take a 20-second break and look at something 20 feet away.
  - ◇ Blink more often to reduce dryness.
  - ◇ Clean digital screens frequently to reduce glare.
  - ◇ Adjust screen text size to comfortably fit your eyes.
  - ◇ Reduce screen viewing time, if possible.

*(continued on page 2)*



## Are you prepared for a dental emergency?

Thousands of dental emergencies – from injuries to painful abscessed teeth – take place every day. Would you know what to do if your child broke a tooth or had a tooth knocked out while playing outdoors? What if you had a bad toothache in the middle of the night and couldn't get to the dentist until the next day? Knowing what to do can lessen the pain and save a tooth that might otherwise be lost.



**February is National Children's Dental Health Month**

Keep your dental office phone number and an after-hours emergency number with other emergency numbers, such as your family doctor, and fire and police departments. Some families post these numbers on the refrigerator or inside a kitchen cabinet door near the phone. Call the dentist immediately for instructions on how to handle a dental emergency.

**Toothache:** Rinse your mouth with warm water to clean it out. Gently use dental floss or an interdental cleaner to remove any food or other debris that may be caught in between the teeth. Never put aspirin or any other painkiller against the gums near the aching tooth. This can burn gum tissue. If the toothache persists, try to see the dentist. Don't rely on painkillers. They may temporarily relieve pain but your dentist should evaluate the condition.

**Knocked-out (avulsed) tooth:** Try to find the tooth! This may not be easy if the injury took place on a playground, basketball court or while skateboarding, so try to stay calm. When recovered, hold the tooth by the crown and rinse the root in water if the tooth is dirty. Don't scrub it or remove any attached tissue fragments. If possible, gently insert and hold the tooth in its socket while you head to the dentist. If not possible, put the tooth in a cup of milk and bring it to the dentist. Time is critical for successful re-implantation, so try to get to your dentist immediately.

**Broken tooth:** Rinse your mouth with warm water to clean the area. Use cold compresses on the outside of the cheek to help reduce the swelling.

**Tongue or lip bites or wounds:** Clean the area gently with a clean cloth and apply cold compresses to reduce any swelling. If the bleeding can't be controlled, go to a hospital emergency room or clinic. You may be able to reduce tongue bleeding by pulling the tongue forward and using gauze to put pressure on the wound.

**Objects caught between teeth:** Try to gently remove the object with dental floss. Never use a sharp instrument to remove anything stuck in between your teeth. If you can't dislodge it with floss, contact your dentist.

Source: American Dental Association

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- **Adjust your workstation setup**
  - ◇ Create a comfortable viewing distance. While at the computer, extend an arm and rest it comfortably on the monitor (as if "high 5-ing" the screen), ideally 20-28 inches away from the eyes.
  - ◇ Adjust the screen directly in front and slightly below eye level.
- **Adjust workstation lighting**
  - ◇ Reduce the amount of overhead and surrounding light.
  - ◇ Reduce device brightness. Change ground color to cool gray instead of bright white.
  - ◇ Attach a glare-reduction filter to the screen.

Consulting an eye care provider regarding specially designed computer eyewear is another option. This eyewear utilizes different filters, lenses and materials tailored to fit digital lifestyle needs. Although select retailers carry computer eyewear, consulting an eye care provider is recommended when considering the best options for vision needs.

Digital devices are here to stay. The impacts of regularly using these devices on long-term eye health remain to be seen. Consumers need to be more aware of surrounding HEV/blue light exposure and be proactive in protecting their vision. Taking steps to reduce digital eyestrain, along with regular eye exams, can ensure long-term visual health.

Resource: *Hindsight is 20/20/20: Protect Your Eyes from Digital Devices*, [thevisioncouncil.org](http://thevisioncouncil.org)

Kindness can be contagious •



wellness  
& safety



## Simple kindness can be contagious

*Celebrate Random Acts of Kindness Week, February 14-20*

The negativity we see daily in social media and news sound bites can easily spill over to how we treat each other. However, it's just as easy to spread kindness to our family, friends, coworkers and strangers. By being a catalyst for kindness, we can be a positive force to those around us and in our larger community.

Kindness is contagious and the opportunities to be kind are numerous and often simple. For example:

- **Offer affirmation.** Words can heal, bring comfort and transform lives. Choose to be an affirming person. Offer encouragement and find the positive in all situations.
- **Smile at strangers.**
- **Give care packs to the homeless.** Small packages of toiletries, water and food are helpful.
- **Leave change in a vending machine.** Pay a bridge toll for the car behind you.
- **Eat lunch with someone new.**
- **Stop negative conversations.** Be aware of the subtle shift in tone of a conversation that may go in a negative direction. Change the subject or surprise them and make a positive comment about the situation.
- **Send a note of appreciation to someone who has assisted you.**

Kindness can also improve personal health. Scientific studies have shown that acts of kindness produce the hormone oxytocin in the brain and throughout the body. Oxytocin causes the release of the chemical nitric oxide in blood vessels, which expands the blood vessels. This reduces blood pressure and thus protects the heart. Other research shows that oxytocin reduces the levels of free radicals and inflammation in the cardiovascular system and thus slows aging at its source. (Incidentally, free radicals and inflammation play a major role in heart disease, so kindness truly is good for the heart.)



*"I expect to pass through life but once. If, therefore, there be any kindness I can show, or any good thing I can do to any fellow being, let me do it now, and not defer or neglect it, as I shall not pass this way again." – William Penn*

The Random Acts of Kindness Foundation has numerous resources to inspire and motivate students. Research has shown that students who learn in positive environments have better school experiences. They enjoy higher test scores, learn new skills at a faster rate and are overall happier at school. Free lesson plans are available at [www.randomactsofkindness.org](http://www.randomactsofkindness.org).

Commit to making the New Year kinder.

Source: *5 Beneficial Side Effects of Kindness:*  
[www.randomactsofkindness.org](http://www.randomactsofkindness.org)

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- Wintertime WeTip
- Shake up your routine

## Get out of that rut

Michele Mariscal, SIA Prevention Specialist

Are you in a rut, feeling non-creative and anxious? Having a routine is helpful, but at times it's necessary to "shake it up" and do something different. Maybe what you need is to try some of these rut-busting activities:



- **Speak to someone you see every day** but haven't spoken to before.
- **Rearrange your work area.**
- **Take a different route to work** in the morning.
- **Part your hair on the other side.**
- **Sign up for a class to learn how to do something** you've never done before.
- **Use your left hand to brush your teeth** if you're right-handed or your right hand if you're left-handed.
- **Pretend you're a photographer** – for one day, look at your surroundings as opportunities for unusual photographs.
- **Draw something you see every day.** Don't worry about how good the drawing looks, just "see" the object.
- **Pretend it's your first day at work** – what are your reactions?
- **Find a new use for an object** commonly found in your work area.

Source: Parley International



## WeTip in the winter

Remember to take advantage of the free WeTip materials. The darker nights of the winter offer opportunities for theft at your campus. Remind visitors that the site is being watched and that crime information can be anonymously reported. For promotional materials, contact your district WeTip liaison or Teresa Franco at [tfranco@sia-jpa.org](mailto:tfranco@sia-jpa.org).



*The material in this newsletter should be part of your Injury and Illness Prevention Plan (IIPP).*

*Keep a copy of this newsletter in your IIPP binder and be sure all employees receive a copy.*

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