

Tech Break

From smartphones and tablets to game consoles, people are hooked on technology. However, the ever-increasing use of these devices has resulted in a dramatic rise in injuries to the hands, wrists and elbows, as well as the neck and back.



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“We are more connected than ever, and all of this connectivity involves the use of our hands,” said Joseph Valenza, MD, director of pain management, Kessler Institute for Rehabilitation (www.kessler-rehab.com). “Overuse, however, can quickly lead to numbness, pain and loss of function. We’ve seen an alarming increase in tech-related injuries in recent years. That’s why it’s important for everyone to be aware of the symptoms of these ‘digital injuries’ and seek treatment before more serious complications arise.”

On average, adults respond to 40 emails each day, spend 23 hours a week texting, and play games for more than 6.5 hours a week.¹ Children are equally impacted with hours of computer-based schoolwork, texting and playing games. Considering the time people spend on these devices – and the force exerted on the fingers and hands – it’s not surprising that problems can develop.

“Whether typing or texting, playing games or surfing the Internet, the use of these devices and our increasing dependency on them puts us all at risk,” noted Norma Glennon, OT, CHT, Kessler Institute. “The continuous pressure of hitting the keys, tapping a screen, or even holding a device can affect the nerves, muscles and tendons in the hand, wrist, elbow and shoulder – and cause any of a number of what are called repetitive stress injuries.”

The more common Repetitive Stress Injuries (RSIs) include:

- **“Texting thumb”** or De Quervain’s tenosynovitis, an inflammation in the tendons that

leads to pain and cramping

- **“Trigger finger”** (stenosing tenosynovitis) causes the thumb or other fingers to lock or snap.
- **“Text claw”**—from holding devices for long periods of time—causes pain, cramping and loss of hand and wrist function
- **Carpal tunnel syndrome** is marked by pain, swelling, tingling and numbness in the hand and wrist
- **“Tennis”** or **“selfie elbow”** (epicondylitis) and **“cell phone elbow”** (cubital tunnel syndrome) produce aching, burning and numbness in the hand, forearm and elbow

Overuse can also lead to ruptured tendons and permanent loss of function, as well as “Tech Neck” (<http://kessler-rehab.com/company/newsroom>) and pain in the shoulders and back from hunching over and looking down at these devices.

Many of these tech-related injuries can be avoided by using common sense – putting down your device and taking regular breaks throughout the day. As a national leader in physical medicine and rehabilitation, Kessler Institute offers the following 10 tips to help prevent injury in tech-users of all ages:

- Watch for early warning signs, such as a tingling sensation, pain or numbness in the hands, wrists or elbows, as well as the neck, shoulders and back.
- If you experience pain, stop what you’re doing.
- Rest the affected finger(s), hand, wrist, etc.
- Change your habits and disconnect regularly.

- Give your thumbs a break. Switch hands, use a stylus or the talk-to-text feature on your phone if available, and learn to use a softer touch.
- Stretch and roll. Simple exercises, such as shoulder and wrist rolls or stretching your hands and fingers can help alleviate muscle fatigue.
- Use a neutral grip with your wrist straight when holding your digital device.
- Act ergonomically. Be mindful of your posture, hand and body positioning, and placement of devices.
- Pay attention to play. Studies show that gaming affects people’s perception of pain; that is, they’re so intent on the game, they fail to notice any discomfort and continue playing.
- Seek medical attention. Speak with your physician about which treatments may be most helpful in managing your symptoms/condition: ice or heat packs; splints or braces; anti-inflammatory medication; or physical, occupational and/or specialized hand therapies.

“The best ‘cure’ for tech-related injuries is prevention – using devices wisely, taking breaks, and listening to your body for signs of discomfort. Unfortunately, given the extent to which we rely on our mobile devices, we’re really just one click away from a ‘digital disability,’” said Dr. Valenza. ■

References

1. Pew Research Survey